

EMERYVILLE
GENERAL PLAN
1993

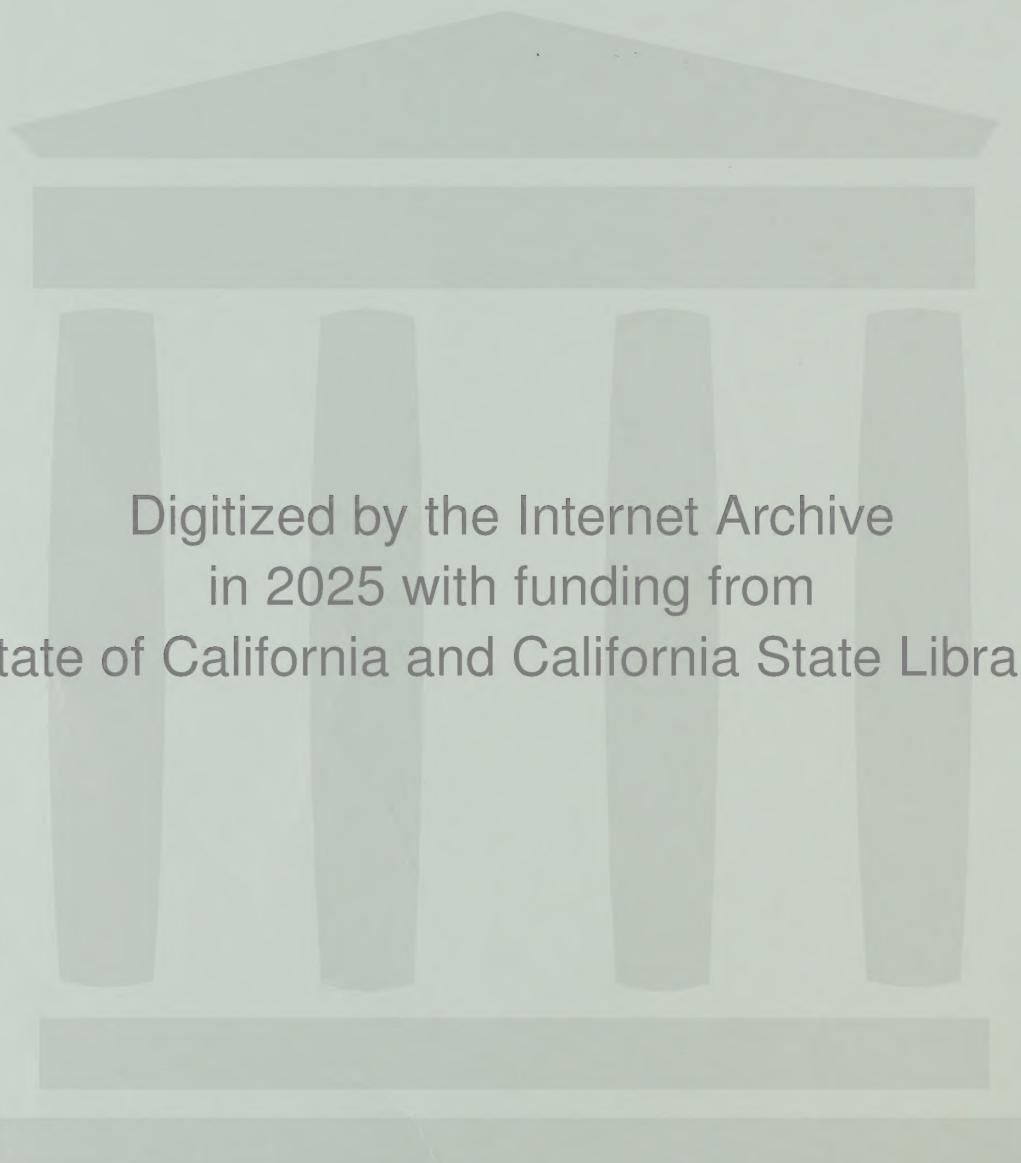
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* (EL) Denotes State-mandated element. Abbreviations used:
Land Use (L.U.); Open Space (O.Sp.); Safety (Saf.);
Conservation (Cons.)

INTRODUCTION

The Emeryville General Plan consists of a series of policy statements (in text and map form) regarding the future of the city. It focuses on issues which may be affected, to varying degrees, by actions of the city government.

As its name implies, it is not a specific blueprint of what the city should be. Rather, it attempts to establish a generalized framework to guide city change, looking some 15 years into the future.

While functioning as a guide to development, it is not, in itself, a regulatory device. It is used, however, as the basis for laws which do control development within the city. (State law, in fact, requires that development regulations be based on and be consistent with the plan.)

The document itself is deliberately concise. It is intended to be used as a handy working tool for city officials and as an easy and accessible reference source for the development community and citizens as well. It replaces a 1987 plan whose primary flaw was that it contained an overabundance of information and detail which made it difficult to use. Because of this, a committee of public officials and citizens was formed in July of 1990 to review and amend the document. A public hearing was held in April, 1991 to discuss the review process and solicit community involvement. This plan is the product of that effort. While there are some differences in its policies, it can be viewed primarily as an updated policy summary of the 1987 plan.

The 1987 plan contains the data, analysis and projections which continue to form the basis of the present plan. Equally important, it was written to function as its own environmental document (in conjunction with a final EIR) to satisfy State CEQA requirements. Its environmental review material remains applicable to the present plan. Finally, it remains a valuable background document for persons wishing to understand the genesis of existing policy. For this reason, all the relevant parts of that plan (with the exception of the goals and policies) are re-adopted as an appendix to the present plan.

State planning law dictates, to a large extent, what must be contained in a general plan. It sets forth seven mandatory elements which all cities must address (land use, circulation, housing, open space, conservation, noise and safety). While requiring a legitimate basis of data and analysis for its policy conclusions, the State General Plan guidelines permit the policy portion of the planning process to stand on its own as the adopted general plan. The housing element differs from the other elements in requiring detailed housing and employment data and analysis as part of the plan itself. Because of its length, it remains a separate document (although its goals, policies and programs are repeated here). This document, then (plus the housing element) meets all state requirements. The Table of Contents identifies where the required elements may be found within the plan format.

CITYWIDE GOALS

1. Provide services and facilities for Emeryville's citizens. Protect public health and safety and improve opportunities for education and cultural entertainment.
2. Encourage a land use pattern in which a variety of uses - residential, commercial and industrial - are intermingled in a compatible fashion, and which minimize potential threats to public health, safety and the environment.
3. Establish a circulation system allowing for the free movement of persons and goods to, from and within the city while avoiding an overaccommodation to vehicles at the expense of land use and pedestrian movement.
4. Improve the quality and livability of the city by seeking development visually sympathetic to its surroundings and urban character.
5. Encourage land uses which strengthen the tax base while respecting the natural, scenic and historic resources of the city.

COMMUNITY DEVELOPMENT

HOUSING

(The Emeryville Housing Element is contained in a separate document. The Objectives, Policies and Programs of the housing element are repeated here for user convenience.)

AFFORDABLE HOUSING

Objective

- A. Promote affordable housing opportunities for all segments of Emeryville (including senior citizens, larger families, lower and moderate income residents, disabled residents, and female-headed families with children).

Policies

1. The City shall encourage the provisions of second units on lots containing a single family dwelling to serve the needs of lower and moderate income households.
2. The City shall help its special needs population to seek funding to maintain their homes.
3. The City may offer incentives to developers constructing housing meeting elderly and lower and moderate income family needs. These actions may be taken in conjunction with the Affordable Housing Set Aside program. These incentives may include density bonuses, reduced parking requirements, and/or expedited permit processing for affordable housing units.
4. The existing stock of SRO (single unit room occupancy) housing should be retained. If units are demolished or converted, the City may require the units to be replaced with comparable units elsewhere.
5. The City shall use its financial powers and resources to reduce the cost of housing and increase the supply of lower and moderate income housing through devices such as tax-exempt bonds and tax increment financing. Where direct financial assistance is made to an owner of rental housing, the City shall continue to ensure through Rent Limitation Agreements that the owner charges fair rents.
6. The City shall utilize 20 percent of the Redevelopment Agency's tax increment monies for low- and moderate-income housing programs.
7. While local efforts to provide affordable housing shall be a priority, the City shall still make maximum use of available Federal and State housing subsidy programs for elderly, lower income, and disabled households.

8. The City shall encourage nonprofit and limited equity ownership of housing. The City shall consider the feasibility of using its financial resources to assist these efforts.
9. The City shall encourage the production/conversion of housing accessible to physically disabled residents and assist such residents in locating "accessible" housing units. The City shall consider density bonuses for each new accessible housing unit. "Accessible" means that the housing presents no physical barriers to disabled people.
10. The City shall continue to enforce the State Requirements for adaptability in new projects to make them accessible to disabled persons. "Adaptable" means housing whose entry and circulation are designed and constructed so that the unit can be made fully accessible by making relatively minor adjustments and additions rather than structural changes.
11. The City shall determine the most appropriate approach for contributing to existing homeless programs in the immediate area.
12. The City shall encourage non-traditional group housing where it is feasible, as a means of reducing housing costs or increasing housing opportunities.

Housing Maintenance and Preservation

Objectives

- B. Preserve the City's sound housing stock.
- C. Allocate the City resources to rehabilitate and upgrade existing residential units.

Policies

1. The City shall use local, state, and federal resources when available to assist lower and moderate income homeowners and landlords renting to lower and moderate income tenants in maintaining their units in sound condition. The City will target its application of the resources to areas where it would make a visible, long-term improvement.
2. The City shall establish a dual program of incentives and code enforcement to maintain private property. As much as possible, housing rehabilitation should be voluntary. As part of this program, the City shall periodically survey housing conditions to identify substandard housing.
3. The City shall continue to offer its rental rehabilitation loan program which enables applicants to obtain below-market interest rate loans to improve rental property and normally requires rents to be controlled for 15 years.

4. The City shall discourage the demolition or conversion of housing in sound condition. If demolition is necessary, the City shall investigate means to secure replacement housing for displaced persons and families of lower or moderate income, preferably in the immediate vicinity. The project proponent could be required to construct the housing, or could be contribute fees into a fund for the purpose of constructing housing.
5. The City shall aggressively advertise the availability of various housing programs and monies to assist in the rehabilitation and upgrading of the housing stock.
6. The City shall include seismic retrofitting in its housing rehabilitation program.
7. The City's Housing Rehabilitation Program shall allow the construction of additional units as an eligible use of Redevelopment Agency Funds.
8. The City shall endeavor to either preserve or replace affordable housing units for tenants whose restricted units have converted to market rate due to the expiration of restrictive covenants.
9. The City shall encourage the improvement of existing residential buildings.

Reduced Housing Costs

Objective

- D. Develop and implement programs to reduce the cost of new housing.

Policies

1. Wherever feasible, the City shall encourage higher residential densities to reduce developers' costs, which in turn should lower housing costs to the renter or purchaser. The City may offer developers bonuses if units for lower and moderate income households are provided.
2. The City will consider requiring all developers of residential projects with 30 or more units to provide 20 percent of the units as affordable to low- and moderate-income households, for a period of 25 years. This program will include both non-financial and financial incentives as a measure to assure the highest feasible level of affordability.
3. Manufactured housing shall be permitted in the city to the extent required by State law.
4. The City shall explore the feasibility of issuing tax-exempt mortgage revenue bonds to offer low-interest loans to lower and moderate income households or to reduce the costs to developers of constructing such housing.

5. The City shall encourage new rental housing construction. The City shall safeguard tenants of rental housing which is assisted with City financial support from excessive rent increases by executing Rental Limitation Agreements.

Housing Opportunities

Objectives

- E. Promote new housing opportunities for all economic groups of both the city and a fair share of the region.
- F. Promote development of a variety of housing types in the city, including housing types which will attract family households, and innovative and unusual housing types which promote a sense of community and place.
- G. Encourage opportunities for people to live and work in the same space.
- H. Encourage the development of family housing, particularly in the Triangle and the northeastern sections of both North and South of Powell districts (see Figure 3, Neighborhoods and Districts).

Policies

1. The City shall encourage development of housing on surplus, underused, and vacant public land. Presently, there are few such opportunities, but as lands become available and if they are not needed for other public purposes, they may be rezoned to accommodate housing development.
2. The City shall encourage residential development in mixed use areas, particularly on large industrial sites.
3. The City shall facilitate the conversion of underused industrial areas when appropriate for residential or live/work use. Several sites have been identified (see discussion on potential land suitable for residential development). The City shall take a pro-active position in assuring that the necessary discretionary actions are taken to accommodate residential development on these sites, whether as exclusively residential projects or as mixed use projects. Further, the City shall maximize conditional use permit densities when appropriate to the surrounding neighborhood.
4. The City shall encourage infill housing and housing above commercial development.
5. The City shall encourage a variety of housing types, including live/work developments.
6. The City shall prohibit discrimination against households with children (Senior housing

projects may be exclusively for senior citizens) and encourage the construction of projects suitable for households with children.

7. The City shall encourage housing opportunities for all economic groups throughout the City, including the elderly and single-parent families. The City shall explore strategies to retain some low and moderate income housing whenever actions are proposed that may displace these units.

Energy Conservation

Objective

1. Maintain development and construction standards that encourage energy conservation in residential use.

Policies

1. The City shall continue to enforce California Administrative Code title 24 energy conservation standards.
2. The City shall encourage utilization of passive solar energy systems and other energy savings and water conservation measures. The City shall also provide information on water conservation techniques to all residential development and rehabilitation projects.
3. The City shall encourage increasing the energy efficiency of existing residential structures through public education and financial assistance.

Equal Housing Opportunities

Objective

- J. Prevent discrimination in housing opportunity based on having children, race, religion, age, sexual orientation or source of income.

Policy

1. The City shall assure that services are provided to adequately address cases of housing discrimination and landlord/tenant conflicts by maintaining a contract with a skilled and experienced housing counseling service provider.

TABLE 1: HOUSING PROGRAMS, 1990-1995

<u>Action</u>	<u>Agency</u>	<u>Goal & Time Frame</u>
I. Objective: Affordable Housing Opportunities for Low-Income and Special Needs Population		
1. In screening applicants for rehabilitation loans, give priority to loans which will benefit lower and moderate income households. Funding sources for the rehab program include a portion of the agency's tax increment funds, CDBG, Federal rental rehab resources and other sources that they may become available.	RA	Ongoing. 100 over 5 year planning period
2. Amend zoning regulations to offer a density bonus for production/conversion of units for elderly or disabled lower income households or units accommodating three or more persons, possibly equal to one addition unit for every unit produced/converted. Consider waiving parking requirements on a project-by-project basis for such units.	CE	1992
3. Record restrictions on all new affordable units located on individual parcels (i.e., not second units or apartment buildings) which have been constructed with City financial assistance to limit prices upon resale.	CE, RA	Ongoing. 10-20 by 1995
4. Continue to publicize Section 8 Existing Program which provides rent subsidies to lower income families.	CE, ACHA	Ongoing
5. Utilize state and federal assistance as it becomes available or assist local nonprofits in same, and address the needs of the City's low-income or special needs groups. These resources will be combined to achieve the housing production and rehab goals outlined in Actions 1 and 2.	RA	Ongoing. Current applications for Section 202, Prop. 77 and Prop. 84

<u>Action</u>	<u>Agency</u>	<u>Goal & Time Frame</u>
6. Issue bonds for development of rental or for-sale housing for very low and lower-income households.	RA	Bond issued October 1990 netting \$6.1 million. Assist 200 units.
7. Provide financial support to regional agency or program that provides housing to the homeless.	CE, RA	Determination regarding funding by close of 1991.
8. Develop City-assisted child care center to provide low-cost child care support to female-headed and low-income households.	RA	Development of enlarged child-care center and extended day care program by March 1, 1991. Completion of 50-unit senior project by 1992.
9. Write down the land cost where feasible and provide additional financial support for the development of low-income housing for the elderly and disabled.	RA	Completion of 50-unit senior project by 1992.
10. Allow and encourage non-traditional group housing.	Plan	Ongoing
11. Continue to allow homeless or transitional shelters anywhere in the city with a use permit.	CE	Ongoing
12. For multifamily projects with 30 or more units, consider requiring 20 percent of the units for households with three or more members. For projects with 30 or more units in the Triangle or in the North or South of Powell districts consider requiring a minimum of 40 percent of the units for households of three or more members.	CE	Decide on zoning amendment by close of 1992.

II. Objective: Housing Maintenance and Preservation

1. Target Community Development Block Grant (CDBG) monies for rehabilitation and neighborhood revitalization. Anticipate funding of approximately \$50,000 annually.	CE, RA, CHCD	Utilize all CDBG monies toward financing the 100 rehab loans planned for a 5 year planning period.
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<u>Action</u>	<u>Agency</u>	<u>Goal & Time Frame</u>
2. Housing code enforcement program to assist property owners in upgrading their structures, relying on voluntary compliance.	CE	Ongoing
3. When appropriate projects arise, apply to the State Housing & Community Development for Loan Programs (Progs. 77 and 84) targeted to housing lower and moderate income homeowners and renters.	CE, NPc, CHCD	Utilize all CDBG monies toward financing the 100 rehab loans planned for a 5 year planning period.
4. Establish a seismic retrofit component of the Housing Rehabilitation program.	CE, CHC	Program began in 1990; 20 units per year.
5. Grant variances, where feasible, on substandard lots in single-family neighborhoods.	Plan	Ongoing
6. Amend regulations to require City Council approval of all residential demolitions to discourage reducing the overall housing stock. Establish criteria for handling demolition requests.	CE	Establish criteria by end of 1992.
7. Obtain Section 8 vouchers for households whose Housing Rehabilitation Program rental restrictions have expired.	RA	Secure reservations by end of 1992.
III. Objective: Reducing Housing Costs		
1. Continue to permit manufactured housing and mobile homes in residential districts.	CE	Ongoing
2. Investigate feasibility of issuing tax-exempt mortgage revenue bonds to help rehabilitate, purchase, or reduce costs for projects providing lower income housing.	CE, RA	Consider as an option
3. Continue to permit higher residential densities consistent with the land use policies contained in this Plan.	CD	Ongoing
4. Utilize state and federal programs which assist in offsetting housing costs to low/moderate income households.	CE, CHC	8 MCC's. The County is considering a 2nd round once 1st are issued.

<u>Action</u>	<u>Agency</u>	<u>Goal & Time Frame</u>
5. Continue a First Time Homebuyers program to provide financial assistance to first-time homebuyers.	RA	Program start up in 1990. Anticipate 100 loans over five years.
6. Continue an Affordable Housing Set Aside Program to require developers of residential projects over 30 units to provide 20 percent of the units at rates affordable to low and moderate income households, for a period of 25 years.	RA	Program start up in 1990. Anticipate 160 units over five years.

IV. Objective: Housing Opportunities/New Housing Production

1. Utilize Redevelopment tax increment monies to acquire vacant and underutilized parcels for new housing.	RA	10-20 units over 5 years. Ongoing.
2. Encourage development of housing in mixed-use districts.	CE	Ongoing; on a project by project basis.
3. Continue to permit live/work developments.	CE	Ongoing
4. Utilize City funds to assist non-profit and limited-equity cooperatives in the acquisition of housing sites or in rehabilitation of existing buildings.	CE, RA	Ongoing
5. Rezone Catellus Project site from Light Industrial to Mixed Use.	CE	Action taken by late 1992
6. Modify regulations, if necessary, on 2.5 acre site adjacent to Holiday Inn to allow High Density Residential.	CE	Action taken by late 1993
7. Rezone Emery Bay Club & Apts. II site from Medium Density Residential to High Density Residential.	CE	Action taken late 1991

V. Objective: Energy Conservation

1. Continue to administer State Title 24 Energy Conservation Building Standards for Residential Structures.	CE	Ongoing
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<u>Action</u>	<u>Agency</u>	<u>Goal & Time Frame</u>
2. Continue to advertise rehabilitation loan program, which makes low-interest loans available for weather-stripping, among other improvements.	CE	Ongoing
VI. Objective: Equal Housing Opportunity		
1. Support and participate in Operation Sentinel to assure compliance with fair housing laws.	CE, RA	Ongoing
2. Continue to enforce anti-discrimination laws by contracting with a skilled and experienced housing counseling service provider. Seek assistance of County in monitoring compliance.	CE, CHCD, OS	Current contract ends 1992; renew this one or enter into one with another provider.

*** Agency abbreviations:**

CE=City of Emeryville; RA=Redevelopment Agency; Plan=Planning Dept.; ACHA=Alameda County Housing Authority; CHCD-County Housing & Community Development; NPc=Non-profit corporations; OS=Operation Sentinel

ECONOMIC DEVELOPMENT

Objectives

- A. Facilitate the transition of Emeryville into an intensively developed city with a wide range of economic activity, befitting its central location in the Bay Area.
- B. Strengthen the City's tax base by encouraging new economic activity with high tax generation potential.
- C. Encourage the establishment of retail and service activities now absent but desired and needed by the Emeryville residents.
- D. Encourage the establishment of businesses that will employ Emeryville residents.
- E. Seek economic development which could improve the jobs/housing balance of the region.

Policies

- 1. The City encourages the establishment of small businesses and new start up firms to promote economic diversity and job growth.
- 2. The City will undertake steps to implement the San Pablo Avenue Revitalization Plan.
- 3. The City will actively seek the establishment of retail development such as a supermarket, drug store or hardware store to provide for the shopping needs of Emeryville residents.
- 4. The City will encourage businesses to hire Emeryville residents, both to reduce unemployment and to reduce commute distances.
- 5. Businesses displaced by new development will be encouraged to relocate in Emeryville and shall be given assistance to find suitable new locations.
- 6. The City will continue to evaluate the needs, plans and problems of existing Emeryville businesses. It will continue to cooperate with the Chamber of Commerce and the Emeryville Industry Association in such efforts, and use the information developed to assist firms where feasible.

CIRCULATION

Overall Objectives

- A. Provide for the safe, efficient and convenient circulation of people and goods to, from and within the city.
- B. Cooperate with responsible agencies in developing a regional transportation plan.
- C. Provide a circulation system capable of accommodating the land uses and densities proposed in the plan and portrayed on the Land Use Plan (Fig. 1).

Policy

- 1. The map entitled Circulation Plan (Fig. 2) delineates the City's proposed street, pedestrian and bicycle systems.

Freeway System

Objective

- D. Seek Reconfiguration of the freeway system (I-80 Eastshore and I-580 Mac Arthur Freeways) to increase their service to Emeryville users while minimizing any concurrent impacts.

Policies

- 1. The City shall continue to seek a re-design of the Powell Street interchange with I-80 to accommodate all desired traffic movements with a minimum amount of delay.
- 2. Additional land area required for freeway improvements should be kept to a minimum.
- 3. The I-80 frontage road should be maintained as a collector street in order to discourage its use by regional through traffic.
- 4. The City shall continue to work with neighboring cities and responsible agencies to seek a redesign of the Ashby interchange with I-80. Any redesign should accommodate movements to and from Bay Street in both directions.
- 5. Any high occupancy vehicle (HOV) road constructed by Caltrans should have minimal negative impacts and should accommodate public transit serving Emeryville.

6. The City shall seek improved access for Emeryville users to and from I-580 and the Bay Bridge.

Street Systems

Objectives

- E. Undertake and complete the street development and improvement projects portrayed on the Circulation Plan (Fig. 2).
- F. Increase the capacity and efficiency of street intersections where needed.
- G. Provide financing systems under which new development will share in the costs of needed street projects.
- H. Cooperate with Oakland and Berkeley to improve intersections in and around Emeryville that have an important effect on local traffic conditions.

Policies

1. The City will continue a street improvement program and coordinate the improvements with development projects.
2. The City has established and will administer a program imposing developer fees to mitigate the impacts of development projects on the circulation system.
3. The City will require development projects, where appropriate, to assist in the financing of parking, street, pedestrian and bicycle way improvements.
4. The City will consider formation of assessment districts for major improvements to the circulation system.
5. Arterial streets designated on the Circulation Plan should be designed to carry traffic between arterial streets and local streets.
6. Local streets designated on the Circulation Plan should be designed to provide access to immediately adjacent areas. Their design should discourage through traffic.
7. The City will establish ongoing liaison with both Berkeley and Oakland and responsible agencies directed toward joint planning of projects to improve traffic conditions and access to the respective cities.

Parking

Objectives

- I. Balance the advantages of curbside parking with the need to maximize the traffic capacity of arterial streets.
- J. Provide off-street parking to encourage desired development.
- K. Utilize off-street parking to encourage a pedestrian oriented environment.

Policies

- 1. The City shall maintain standards and plans for location and design control of off-street parking facilities.
- 2. The City shall modify its off-street parking requirements for specific projects to accept fewer spaces in exchange for programs that would assure a reduction in parking demand.
- 3. The City shall consider the establishment of parking districts and/or other funding mechanisms to provide and operate parking facilities.
- 4. The City will develop regulations allowing the waiver of off-street parking requirements under appropriate conditions.
- 5. The City shall consider prohibiting or restricting curb parking on arterial streets where such parking reduces the needed capacity of the street.

Transit

Objective

- K. Expand transit services and increase the use of public transit in Emeryville.

Policies

- 1. The City will cooperate with AC Transit to promote expanded service and new passenger amenities in Emeryville. It will explore the extent of financial subsidy necessary, if any, to warrant such improvements.
- 2. The City, in the formulation of a Transportation Systems Management (TSM) program shall place emphasis on public transit alternatives to private passenger vehicles.
- 3. The City will encourage other transportation agencies including Amtrak, BART,

interurban bus companies and airport service companies to plan for increased service to Emeryville.

Pedestrian and Bicycle Corridors

Objectives

- L. Establish a citywide network of interconnected pedestrian and bicycle routes to provide access to the major features, attractions, and activities of the city, thus providing recreational benefits and reducing dependence on automobiles.

Policies

- 1. New Bicycle and pedestrian routes shall be developed in conformity with the Circulation Plan (Fig. 2). This plan designates a comprehensive pedestrian and bicycle network to link activity centers, public facilities and open space areas.
- 2. The design of pedestrian and bicycle routes should minimize potential automobile hazards and avoid heavily trafficked streets. Where feasible, separated grade crossings are proposed to bridge dangerous thoroughfares or rail lines.
- 3. The pedestrian and bicycle systems should be integrated into a regional network.

Transportation Systems Management (TSM)

Objective

- M. Promote a variety of techniques to utilize the existing transportation network more efficiently and to reduce single-occupant automobiles use during peak hours.

Policy

- 1. The City will determine whether it should establish a comprehensive TSM program. It will enact regulations and provide staff to implement such a program if established.
- 2. If comprehensive TSM approaches are not immediately warranted, the City will consider a variety of alternative means to reduce peak hour congestion, including voluntary programs by private industry and reducing of parking requirements for employers who establish trip reduction programs.

PUBLIC FACILITIES AND SERVICES

Objectives

- A. Provide support to maintain and improve the Emeryville school system.
- B. Provide public safety facilities and services in a manner to ensure effective and efficient responses to threats to life and property.
- C. Improve and expand social and recreational services and facilities for all segments of the community.

Policies

Public Buildings

- 1. The City will develop a civic center at Hollis Street and Park Avenue to accommodate most administrative, governmental and cultural requirements of the City. The complex should include compatible activities on a non-governmental nature as well, such as retail uses, and public parking, so that it becomes a major activity center.
- 2. The City intends to upgrade its fire services with improved facilities. In addition to the newly-completed Peninsula station on Powell Street, a station may be located at Hollis Street near 53rd. The Hollis and 63rd Street station may be replaced or upgraded.
- 3. The City will continue to provide for the child development center at its newly-developed 53rd Street facility with increased assistance to Emeryville residents.
- 4. The City will continue to provide services for Emeryville senior citizens on Salem Street and integrate the facility with the newly developed housing project on San Pablo Avenue.
- 5. The City shall continue to provide information to the Emery Unified School District concerning major new development so that the future facility requirements can be anticipated.
- 6. The Ralph Hawley School site on 61st Street should be retained as an educational, recreational, and/or child care facility.
- 7. The City shall ensure accessibility for disabled persons in accordance with the Americans with Disabilities Act of 1990.

Recreation

- 8. The City supports the development of an East Bay Shoreline State Park, intends to participate in its detailed planning and urges early financing for its development.

9. Recreational opportunities shall be provided for all residents, regardless of race, age, economic status, physical disability, or location of residence.
10. The Land Use Plan (Figure 1) illustrates the proposed recreation and open space plan. The open space system should provide for: increased pedestrian accessibility to the Bay shoreline, except in ecologically sensitive areas; local pedestrian and bicycle connections between parks and residential areas of East Emeryville, the Bayfront, and the Peninsula; increased recreational opportunities in older residential areas; restoration of Temescal Creek to its natural state where feasible, with park lands adjoining this corridor; and an integrated open space system so that all residents may reach the major open space areas easily and safely.
11. Small parks and open space areas to serve individual neighborhoods should be developed as opportunities arise.
12. All parks and recreation facilities should be planned as part of an overall system which integrates outdoor open space needs with other public facilities needs. Schools should be used as recreational facilities when not being used by the school. The City will seek school district support for such an arrangement.
13. Parks should be designed for low maintenance. Drought-resistant shrubs and trees should be encouraged in passive recreation areas.
14. The open space/recreation system should provide facilities and sites for environmental education, cultural activities, and community events.
15. Parks shall be designed to give individuals a sense of security and well-being and should invite use and allow surveillance by surrounding residents.

Public Utilities

16. The City will develop a program to monitor and repair/upgrade its water, storm drain and sewer lines. All improvements to the existing lines necessitated by new development shall have committed financing before the project may proceed.
17. In areas where major new development is anticipated, the City will require that the construction of roadway, water, sewer and storm drainage improvements be staged to minimize disruption to new road surfaces.
18. The City will continue to cooperate with East Bay Municipal Utility District efforts to curb infiltration and inflow into the sewer lines.
19. The City will seek to have electrical utilities undergrounded throughout Emeryville. It may require undergrounding in conjunction with new development and will explore

means to accomplish undergrounding elsewhere in the city.

Implementation

1. The City intends to pursue the following specific programs to implement the open space proposals of the plan:
 - a. Exactions: In circumstances where discretionary action by the City is needed to allow development, the requirement of land dedication, fees or public improvements.
 - b. Acquisition: The purchase of needed land by negotiation or by condemnation (eminent domain).
 - c. Tidelands: Active participation in the development of an East Bay Shoreline Park as a State park.

LAND USE

Objectives

- A. Create a major activity center in the Bay Area with new office, commercial and high-tech industries and new housing of all types replacing obsolete, incompatible and low-intensity prior use.
- B. Create a living and working environment which protects and enhances existing development, while providing new amenities and facilities for an expanded work force and residential population.

Policies

General

1. Future land development in Emeryville shall be governed by the Land Use Plan (Figure 1) and the zoning ordinance. The plan map provides a generalized interpretation of the written policies and shows the location and extent of all predominant land uses and their relationships. The zoning ordinance provides specificity on a parcel by parcel basis.
2. New development projects shall be at an appropriate density based upon locational considerations, accessibility, and the prevailing character and density of the surrounding development.
3. New development shall be at an intensity that, in general, does not exceed the intensities (expressed as floor area ratios) set forth in the Building Intensity diagram (see Figure 7).
4. The City will monitor the impact of development on its public services. Land use and development proposals which would overload circulation, water supply, wastewater disposal, fire, police, or school systems shall not be approved in the absence of overriding considerations.
5. The City recognizes a potential flood hazard resulting from a tsunami (tidal wave) or from the failure of Lake Temescal dam (see Figure 4) and will review the areas subject to such flooding annually, as required by State law.

Residential

6. The bulk of residential development in Emeryville should be of medium density. High density development will be permitted only in selected locations where high density development already exists or can be accommodated in accordance with City policy. The plan defines medium density as consisting of no more than 45 dwelling units per gross acre and a high density as any development exceeding that. Assuming an average household size of 1.7 persons (the present citywide average), 45 dwelling units would house some 77 persons.
7. Infill residential development in established residential areas should respect the prevailing building type in the surrounding areas, so that new development is not incompatible with the area's existing scale and character.
8. The City shall review residential projects to ensure that the housing offers a quality living environment and is compatible with surrounding neighborhood character.

Commercial

9. The Land Use Plan establishes the general locations of commercial activities. These consist of office and general commercial activities ranging from small businesses serving local neighborhoods to regional retail and administrative offices. While both commercial activities will be located throughout the city except in residential districts, and the bulk of offices will be found in mixed-use districts, areas are established where they are to be the predominant use. Residential use, in addition to the primary commercial use of property, is strongly encouraged in these areas.

Building intensity for commercial uses shall be controlled by standards established in the zoning regulations. Controls may consist of building height limitations, setback and onsite parking requirements, and any other means such as floor area ratios (FAR: the square footage of a building as a percentage of the square footage of the lot).

Industrial

10. Large portions of Emeryville remain industrial on the Land Use Plan. A variety of uses from heavy manufacturing to research and development and arts and crafts may function efficiently side by side. In certain locations, residential uses may also be acceptable. The City will take appropriate steps to assure that impacts and potential incompatibilities between such uses are minimized or eliminated.

Building intensity for new industrial structures shall be

LAND USE

Objectives

- A. Create a major activity center in the Bay Area with new office, commercial and high-tech industries and new housing of all types replacing obsolete, incompatible and low-intensity prior use.
- B. Create a living and working environment which protects and enhances existing development, while providing new amenities and facilities for an expanded work force and residential population.

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Building intensity for new industrial structures shall be

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Open Space

11. The Land Use Plan designates the location of open space within the city. Policies and implementation measures for open space are set forth as Recreation Policies under Public Facilities and Services.

Mixed Use

12. Much of the land susceptible to re-use or redevelopment in Emeryville should be developed in such fashion that a variety of compatible uses will be established on the same site. In the largest of such mixed use projects (in excess of 200,000 square feet) residential uses should be required where feasible.
13. The City encourages the integrated planning of large properties or groups of properties for mixed use development. The City may assist in land assembly, financing and planning of such projects.

Implementation

1. The Emeryville zoning ordinance will be revised and amended as necessary to reflect the policies set forth in the General Plan.
2. The City will exercise its redevelopment powers to implement the policies of the General Plan, including the acquisition of land for re-use, the funding of public improvement projects such as streets and parks and provision of financial assistance to developers and home owners.
3. The City will identify large properties or property groups with high development potential and, where feasible, participate in their development through redevelopment agency powers such as land assembly, planning and financing and selection of a master developer.

COMMUNITY DESIGN

Objectives

- A. Unify Emeryville functionally and visually.
- B. Enhance a distinct image and character for Emeryville consistent with its historical past and regional setting.
- C. Retain the low-to-midrise form of buildings in all parts of the city except in close proximity to existing high rise structures on the Peninsula and Bayfront.
- D. Retain the historic grid street system and provide major organizing elements like city gateways, vehicular corridors, pedestrian-oriented corridors, parks and open space, and focal points such as plazas.
- E. Develop a continuous citywide open space network connected with pedestrian corridors to link residential neighborhoods to employment and commercial districts and to a regional shoreline open space.
- F. Enhance the image and environmental values of the city by a comprehensive landscaping system which ensures balance and continuity between built form and the landscape in all future development.
- G. Improve the experience of pedestrian, cyclist and motorist movement throughout the city.

Policies

Building Form

- 1. Buildings and the cumulative image they create should reinforce the character and level of activity appropriate to different areas of the city. New buildings should be visually harmonious with the existing development scale and style.
- 2. The City shall protect the existing character and low-rise scale (no more than 40 feet, generally) of residential areas in the Triangle, North of Powell and South of Powell.
- 3. Development between 47th Street and Park Avenue should have a continuous street facade, uniform setbacks and interior open spaces. Its visual relationship to the existing brick buildings along Park Avenue should be strengthened through the use of similar building materials and structures of similar height.

4. The San Pablo commercial area should be restored with infill development of buildings that form a continuous street facade, thus reinforcing the prevailing character of the row of shops and services.
5. The existing brick buildings along Park Avenue should be retained and restored to preserve and enhance the historic value of the street. The existing continuous street facade should be preserved.
6. The present underdeveloped area along Yerba Buena Avenue should be organized along a grid street system that related to the existing street pattern. The new city blocks may vary in length and accommodate large buildings forming a continuous street facade. North of Yerba Buena Avenue the predominant building height and building materials should be compatible with those along Park Avenue.
7. The rehabilitation of old industrial structures and the addition of new industrial uses should be encouraged in the North of Powell district above 64th Street. Industrial structures located within this area should be permitted to take a form which distinguishes them from the nearby residential area or the mixed use area. Large low-rise industrial buildings should be developed with uniform setbacks. New development should preserve the existing street system and new city block pattern.
8. To reinforce the mid-rise building pattern (no more than 80 feet, generally) in the North and South of Powell districts, the existing brick buildings along Horton Street should be preserved, and large industrial structures, like Westinghouse, ITT Grinnell, and PG&E should be rehabilitated and reused for a mixture of uses and a variety of work spaces and outdoor areas. New buildings should be related to existing structures through the use of compatible building materials and building heights. All buildings should form a continuous street facade along Hollis and Powell Streets.
9. The new building pattern in the Bayfront areas should relate to the new street system, and building scale and orientation should vary according to location in order to protect views.
10. The existing low- to mid-rise building scale in the central portion of the Peninsula should be preserved and extended along the northern side to provide a transition between the high-rise structures and the waterfront. High-rise structures should be confined to the vicinity of the existing concentration. The low-rise building profile should be maintained in the area around the existing marina, where all new uses should be oriented toward the water, and where public access to the waterfront shall be assured.

Cityscape

11. Key entrance points, or "gateways" to the city shall be enhanced and made more identifiable by special landscaping, paving and other physical improvements.

12. Buildings with lots that front on the I-80 freeway should be set back from the freeway and sufficiently buffered by landscaping, open space or offstreet parking so as to minimize the need for sound barriers. Additionally, views to and from the freeway should be considered in the selection of planting materials.
13. Commercial streets should provide an attractive, safe environment to encourage and support commercial activities.
14. Residential streets should be distinguished from non-residential streets by means of design modification which favor pedestrian use and discourage through traffic.
15. The city's parks and open spaces should be connected by a network of paths and streets which accommodate pedestrians and bicyclists. To the extent possible, this network should avoid arterial streets and be visually distinct from them.
16. The historic industrial-warehouse image found in many parts of Emeryville should be preserved and enhanced through the retention of architecturally significant structures and the addition of architecturally compatible new construction.

Landscape

17. The City will adopt a landscape plan for the entire city which indicates the type of planting materials suitable for Emeryville and appropriate for different categories of streets and open spaces. The plan should include drought resistant plants and outline a water conservation program for them.
18. The City will schedule landscape improvements in its capital improvements program in coordination with street and other public improvement projects. Funds should be allocated for the continuing maintenance of such landscaping in conjunction with the c.i.p.
19. The City will require developers to install landscaping consistent with the landscape plan.
20. The City will develop standards for the landscaping of parking facilities.

Objectives

- H. Create activity centers (mixed land uses integrated with public open space) throughout the city and relate them to the circulation and open space network.

Policies

1. The City will participate in establishing activity centers in key locations throughout the

city and link them to the citywide circulation network with paths and streets which accommodate pedestrians and bicyclists and public transit stops.

2. Each activity center should become a distinct focal point, encouraging: different mixes of uses such as office, retail housing, support services; development which serves the functional purpose of the activity center as a whole, rather than the individual buildings; rehabilitation and incorporation of significant old structures; and displays of art.

ENVIRONMENTAL RESOURCES

WATER RESOURCES

Objectives

- A. Enhance the quality of water resources in Emeryville and prevent their contamination.
- B. Encourage and promote water conservation.

Policies

- 1. The City supports efforts of the various public agencies responsible for maintaining and improving water quality in Emeryville.
- 2. Water quality in Temescal Creek should not be degraded since the plan calls for increased public access to the creek as a recreational resource.
- 3. The City supports EBMUD efforts to encourage water conservation.

BIOLOGICAL RESOURCES

Objectives

- A. Preserve the city's biological resources including the ecosystem of the Emeryville Crescent and the San Francisco Bay.
- B. Promote the use of natural areas for educational purposes to the extent that these activities do not conflict with the protection and preservation of wildlife habitat and endangered species in the areas.

Policies

- 1. Wildlife habitat along the Bay shoreline should be preserved and enhanced.
- 2. No Bayfill project shall be undertaken unless it can be shown that the public benefits of any such project far outweigh any environmental damage that might result.
- 3. Public access to the Emeryville Crescent should be controlled to allow regeneration of native vegetation and restoration of wildlife habitat.

AIR QUALITY

Objective

- A. Minimize public health hazards due to air pollution and reduce the generation of air pollutants.

Policies

1. The City supports the efforts of the responsible public agencies to reduce air pollution.
2. The City encourages a variety of alternatives to the use of private motor vehicles, since they are a primary source of air pollution.

ENERGY

Objective

- A. Encourage the use of alternative energy sources and promote energy efficiency and conservation as a means of minimizing the use of non-renewable energy.

Policies

1. The City will support and implement programs providing alternatives to conventional private vehicles.
2. The City will promote energy conservation and the use of renewable energy resources.

CULTURAL AND HISTORIC RESOURCES

Objective

- A. Protect Emeryville's historic and cultural resources and encourage future development to reflect that heritage.

Policies

1. The City will require archeological evaluation of sites with likely archeological resources and require that the development of such sites be monitored during construction; significant findings should be protected or removed.
2. The City supports increased community interest in cultural and historic resources and will

take appropriate actions to preserve such resources.

3. The City strongly endorses the reuse of heritage buildings.

PUBLIC HEALTH AND SAFETY

GEOTECHNICAL HAZARDS

Objective

- A. Reduce potential injury and loss of life and minimize property damage resulting from seismic activity.

Policies

1. Police and fire stations and emergency medical facilities shall be designed or improved to remain functional following the maximum credible earthquake.
2. Utility lines should be placed underground.
3. Legislation requiring that hazardous buildings, such as unreinforced masonry structures, be made safe or demolished will be enforced.
4. The City supports programs which prepare and train citizens to take appropriate actions in an earthquake.

FLOOD HAZARDS

Objective

- A. Protect human life and property from flood hazards while enhancing the visual appearance of Temescal Creek.

Policy

1. Improvements to Temescal Creek should not reduce to its holding capacity or increase erosion.

NOISE




Objectives

- A. Prevent significant increases in noise levels where noise sensitive land uses are located.
- B. Reduce environmental noise where feasible to remedy existing incompatibilities.
- C. Protect occupants of existing and new buildings from exposure to excessive noise.

TABLE 2: NOISE/LAND USE COMPATIBILITY

LAND USE CATEGORY	RECOMMENDED NOISE LEVELS, Ldn (dBA)						
	EXTERIOR RANGE						
	50	55	60	65	70	75	80
Residential:							
Low Density							
Medium to High Density							
Commercial:							
Hotel							
Office							
Restaurant, Retail							
Other							
Industrial:							
Light Industrial							
Custom Manufacturing							
Other							
Public/Quasi-Public:							
School, Library, Church,							
Hospital, Theater							
Other							
Open Space:							
All Categories							

KEY:

	NORMALLY ACCEPTABLE Specified land use is acceptable, assuming standard building construction.
	CONDITIONALLY ACCEPTABLE Standard building construction is not adequate for specified land use; however, mitigation measures may be easily employed to reduce noise to acceptable levels. An analysis of the measures by a qualified acoustical professional is required, to be approved by the City.
	NORMALLY UNACCEPTABLE The specified land use should be discouraged unless the City finds the project to be in the public interest and a detailed analysis by a qualified acoustical professional shows that specific measures which are to be included in the project would reduce indoor and outdoor noise to acceptable levels. The analysis and attenuation measures must be approved by the City.

Policies

1. The City will require that new land uses generate no incompatible noise. Table 2 sets forth maximum recommended noise levels compatible with different types of land use, based on guidelines of the Office of Noise Control, State Department of Health Services.
2. Legislation should be enacted to prevent excessive or annoying noise.

Implementation

1. Apply the standards of Table 2 in reviewing new projects.
2. Require the installation of noise barriers, where feasible, to protect land uses severely affected by noise (see Figure 4. Future Noise Contours (LDN) and 1985 Measurement Locations).
3. Enforce existing State and Federal noise legislation such as laws regarding vehicle operation and equipment.

HAZARDOUS MATERIALS

Objective

- A. Protect human life and property from the threats presented by improperly managed hazardous materials and wastes.

Policies

1. The City will attempt to identify all contaminated sites within the city and cooperate with the responsible public agencies in the development and implementation of guidelines for their cleanup.

FIRE AND CRIME

Objectives

- A. Protect life and property from crime and fire hazards.
- B. Provide members of the community with a sense of security.

Policies

1. High occupancy or high risk buildings constructed prior to existing codes should be retrofitted to reduce potential earthquake and fire damage.

2. The City shall determine that adequate water supply and pressure are available, and that hydrants and any on-site fire fighting equipment and facilities are provided, before approving any new development.
3. The City will continue to conduct annual fire safety inspections and encourage correction of hazardous conditions such as improper storage of flammable materials.
4. Critical public facilities (e.g. police and fire) shall be designed to remain operative during emergencies such as a major fire or earthquake.
5. The City shall encourage developments which are designed to reduce the opportunities for crime to occur.
6. The City shall promote informational and community-involvement crime and fire prevention programs.

EMERGENCY PREPAREDNESS










Objectives

- A. Minimize potential damage to life, environment and property resulting from natural and man-made emergencies.

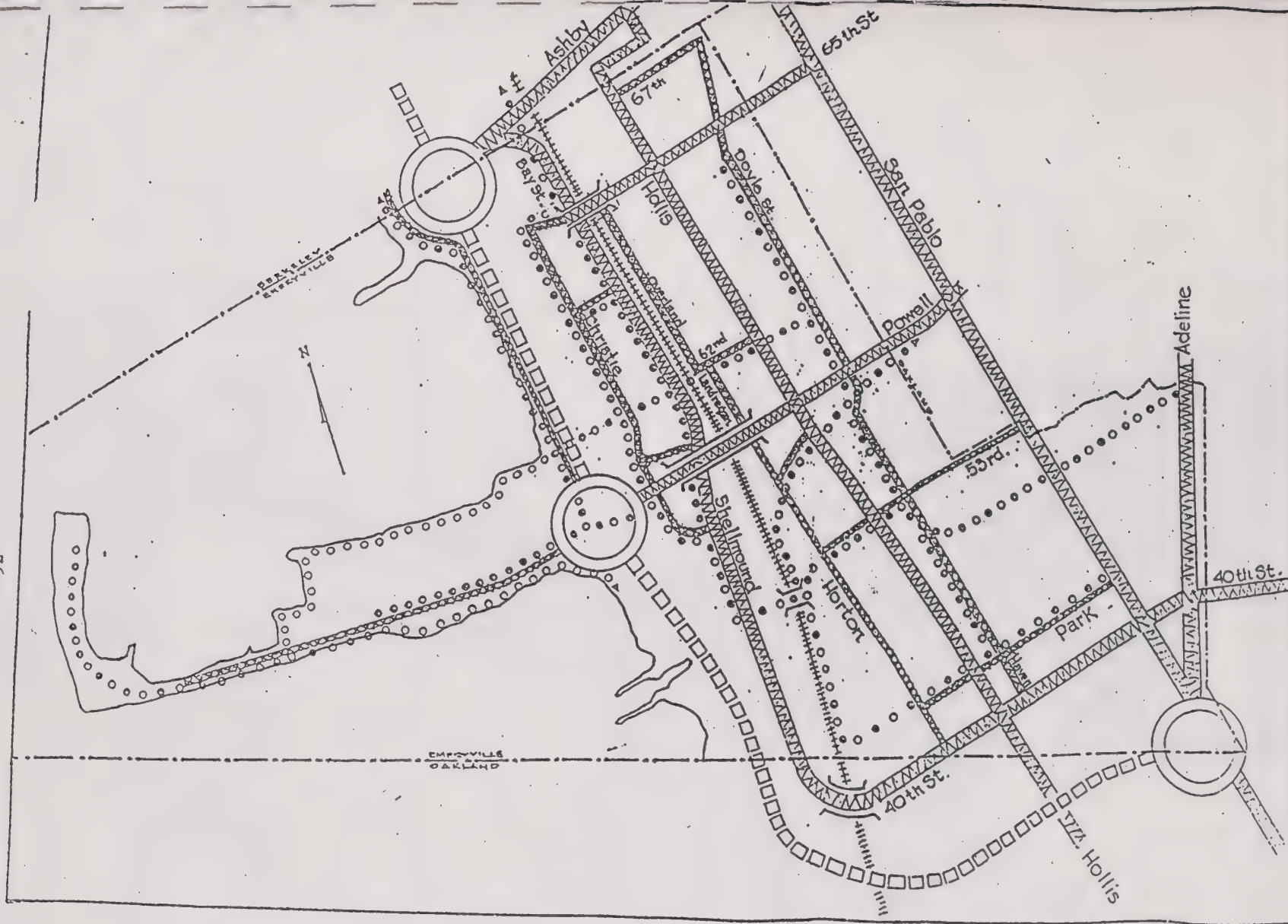
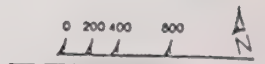
Policies

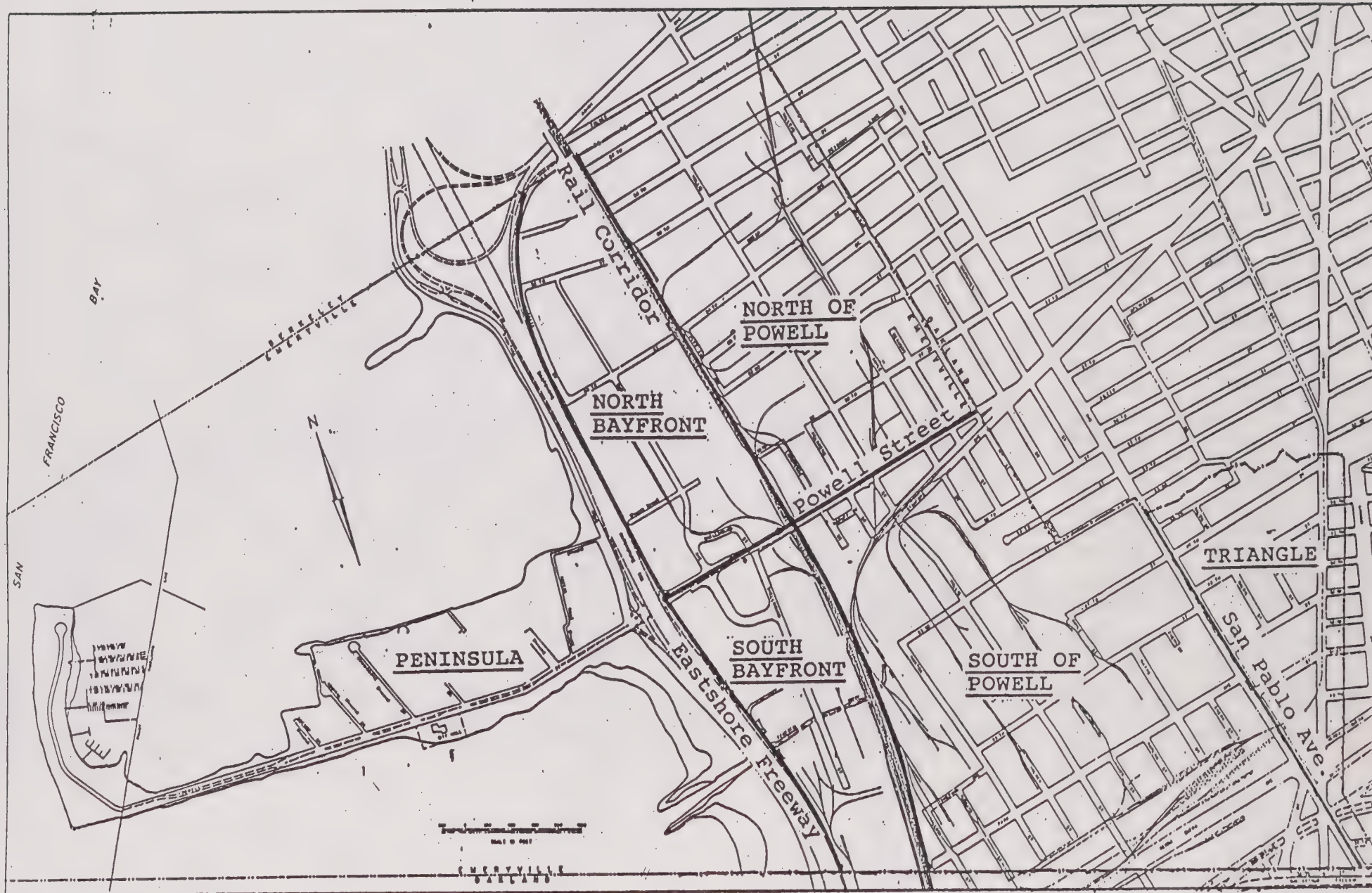
1. An emergency response plan will be maintained and updated as necessary. Figure 6 shows the known extent of potential emergencies and illustrates designated emergency shelters and ordinary evacuation routes.
2. Individual, household and business readiness and self-sufficiency shall be promoted.
3. The City will continue to maintain an Emergency Operations Center for all major emergencies.

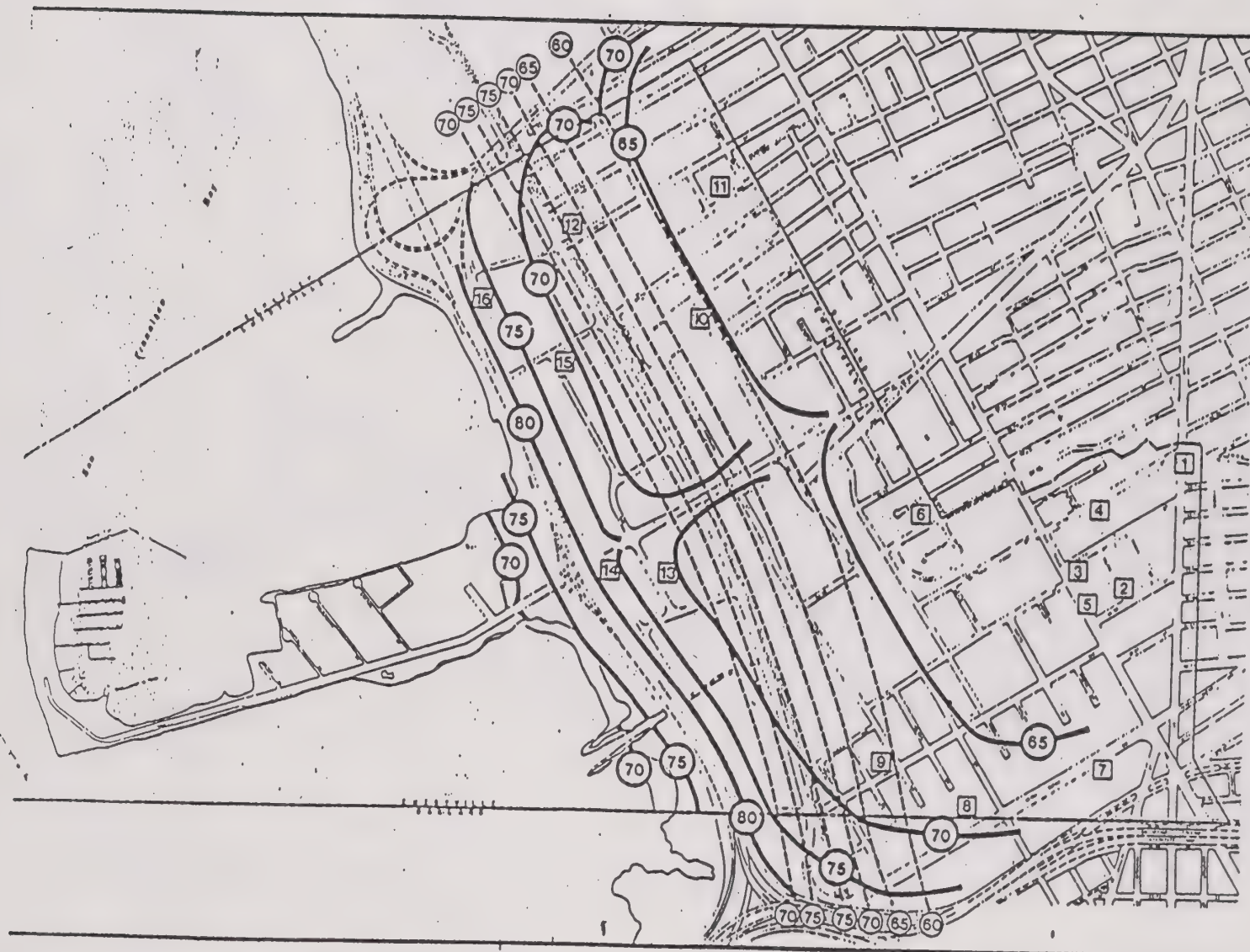
CIRCULATION PLAN

- | | |
|---|------------------------------|
|  | FREEWAY |
|  | ARTERIAL |
|  | COLLECTOR |
|  | FREEWAY
INTERCHANGE |
|  | MAJOR PEDESTRIAN
CORRIDOR |
|  | MAJOR BICYCLE
CORRIDOR |
|  | JOINT PED/BIKE
CORRIDOR |
|  | OVERPASS |
|  | RAIL CORRIDOR |

EMERYVILLE GENERAL PLAN







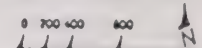
FUTURE NOISE CONTOURS (Ldn) AND 1985 MEASUREMENT LOCATIONS

70 — SURFACE ROAD NOISE LEVELS, dBA
75 — RAILROAD NOISE LEVELS, dBA

1985 NOISE MEASUREMENTS:

Location	Noise Sources	Measured (Ldn) (dBA)
1 Wonder Bread Plant	lane (50-55 dBA); distant traffic	64*
2 43rd/Salem	traffic (up to 80 dBA)	64
3 45th/San Pablo-Elmer	traffic (55-60 dBA)	58
4 47th/Salem-Elmer	traffic (58-72 dBA)	57
5 San Pablo/45th-Park	traffic (65-76 dBA)	66
6 53rd/Boyer	traffic; school playground	61
7 Yerba Buena/ Hollis-San Pablo	freeway traffic	67
8 I-580	freeway traffic	64
9 Park/Morton-Hubbard	auto (60 dBA); truck (80 dBA); traffic; dis- tant industrial activity	63
10 Hollis/62nd-63rd	truck traffic (70-84 dBA)	70
11 Liquid Sugar Industries	traffic; industrial activity (50 dBA)	54*
12 Bay/63rd-66th	traffic; railroad	66
13 Pfizer Chemical	traffic (71 dBA); indu- rial activity (60 dBA)	71*
14 Powell/Cristle	freeway traffic (80-81 dBA); industrial activity	74
15 64th/Cristle	traffic (62-77 dBA)	68
16 I-80	freeway traffic (2-hour measurement)	80

*15-minute Leq; may be slightly lower (0-3 dBA) than Ldn.

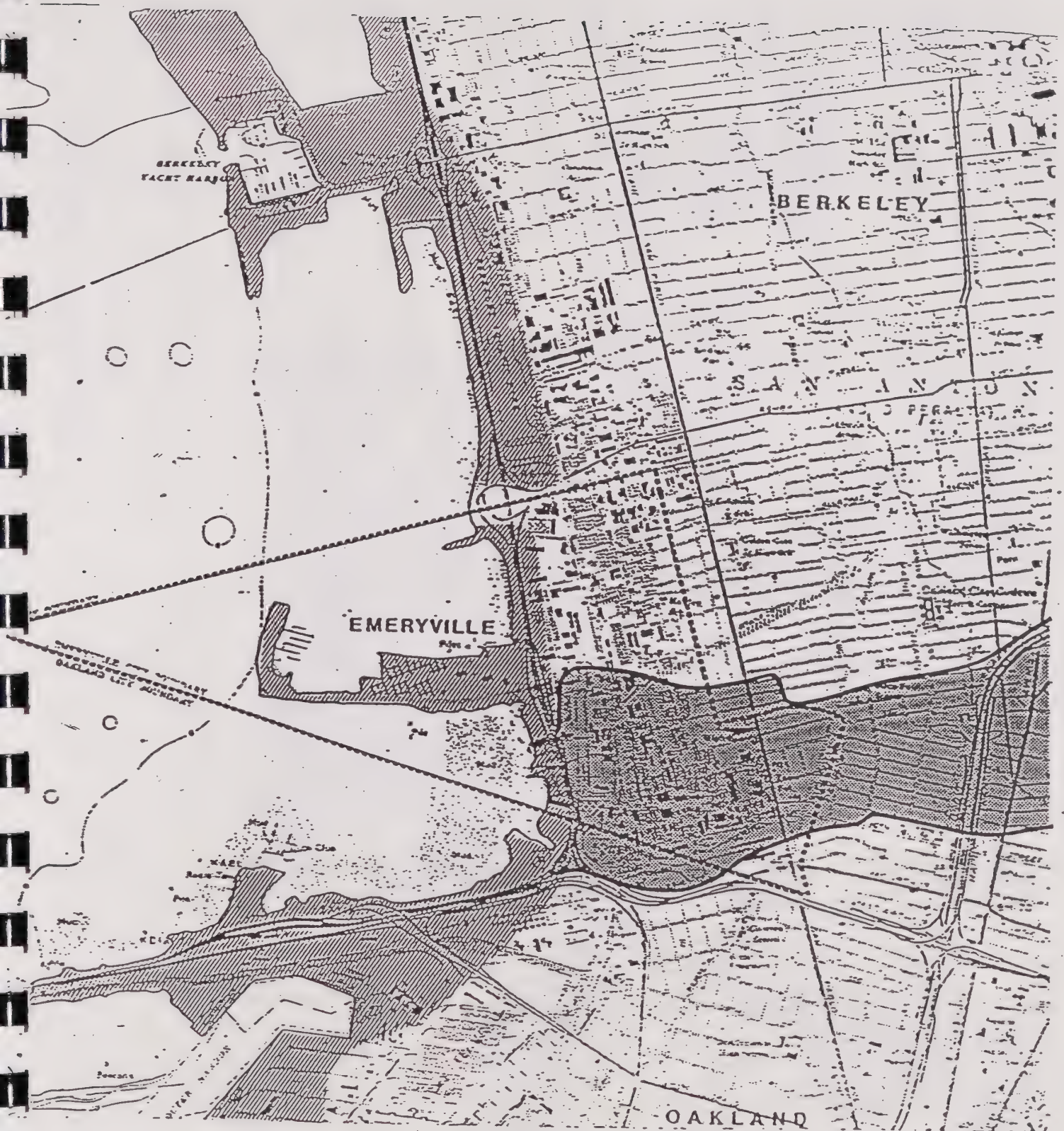


EMERYVILLE GENERAL PLAN

Note: Where surface road and railroad noise contours overlap, the combined noise level heard by the receptor is greater than the noise level from either source alone. When two sources which individually generate equal noise levels are combined, the resulting noise level is 3 dBA greater than the individual noise source. For

example, a receptor in the Bayfront exposed to 70 dBA from traffic and 70 dBA from trains would hear 73 dBA. Where the sound level difference between two noise sources is 5 dBA, the receptor hears a 1 dB increase over the louder sound.

FIGURE 4.



SOURCE: Ritter and Dupre, Maps Showing Areas of Potential Inundation by Tsunamis, 1972; Alameda County Flood Control and Water Conservation District, 1973.

FLOOD HAZARDS

 TSUNAMI INUNDATION
  DAM INUNDATION (LAKE TEMESCAL)

EMERYVILLE GENERAL PLAN

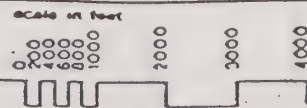
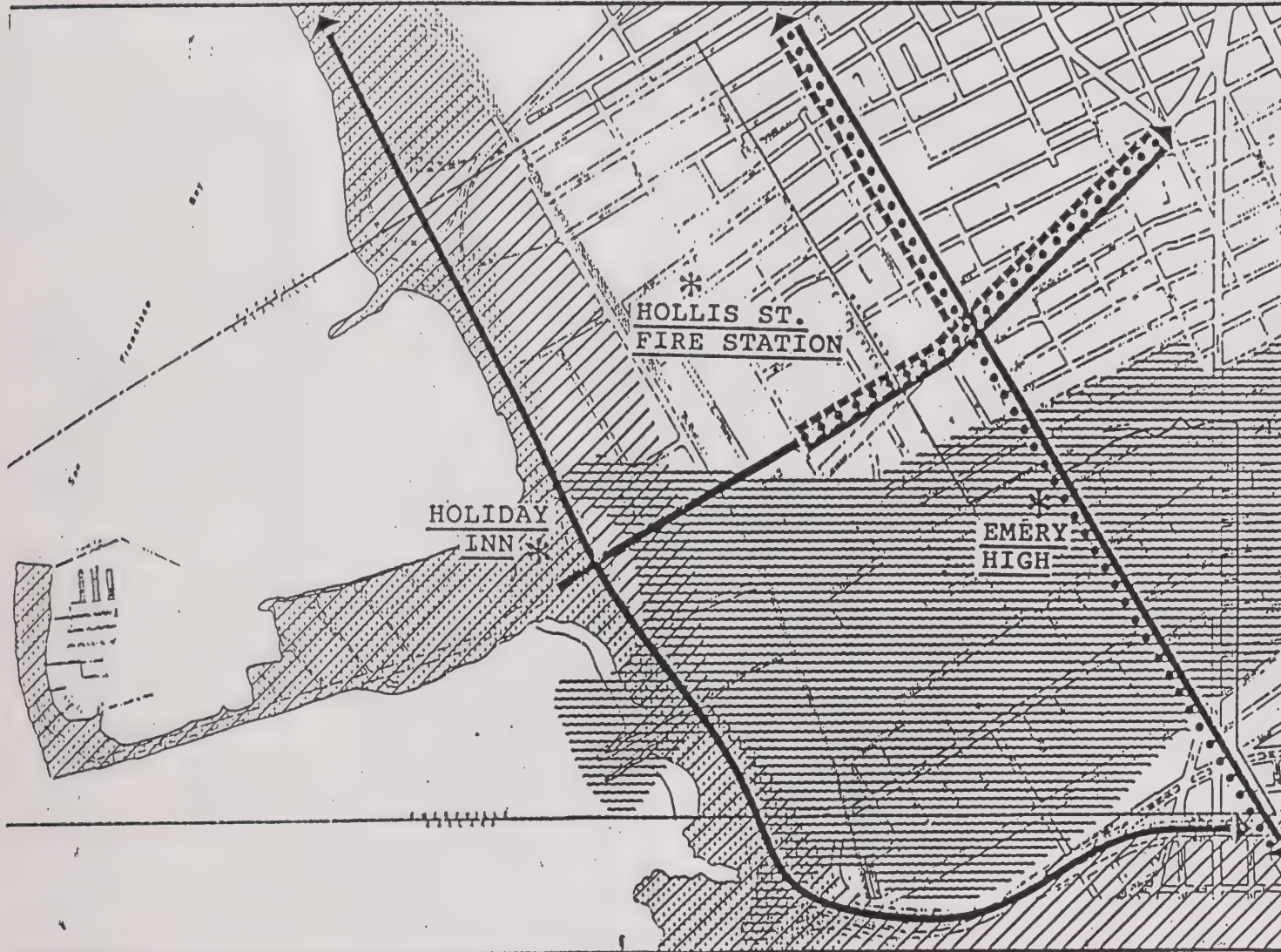









FIGURE 6

EMERGENCY POTENTIAL AND EVACUATION ROUTES



-  AREA SUBJECT TO VIOLENT GROUND SHAKING DURING MAJOR EARTHQUAKE (All other areas in Emeryville subject to very strong ground shaking)
-  APPROXIMATE EXTENT OF WATER INUNDATION FOLLOWING DAM FAILURE AT LAKE TEMESCAL
-  APPROXIMATE AREA OF TSUNAMI INUNDATION (20-foot runup at Golden Gate Bridge)
-  FLOOD INUNDATION EVACUATION ROUTES
-  EARTHQUAKE EVACUATION ROUTES
-  GENERAL EVACUATION ROUTES
-  EMERGENCY SHELTERS

Sources: Alameda County Flood Control and Water Conservation District; USGS MF-709, MF-480; SCA.

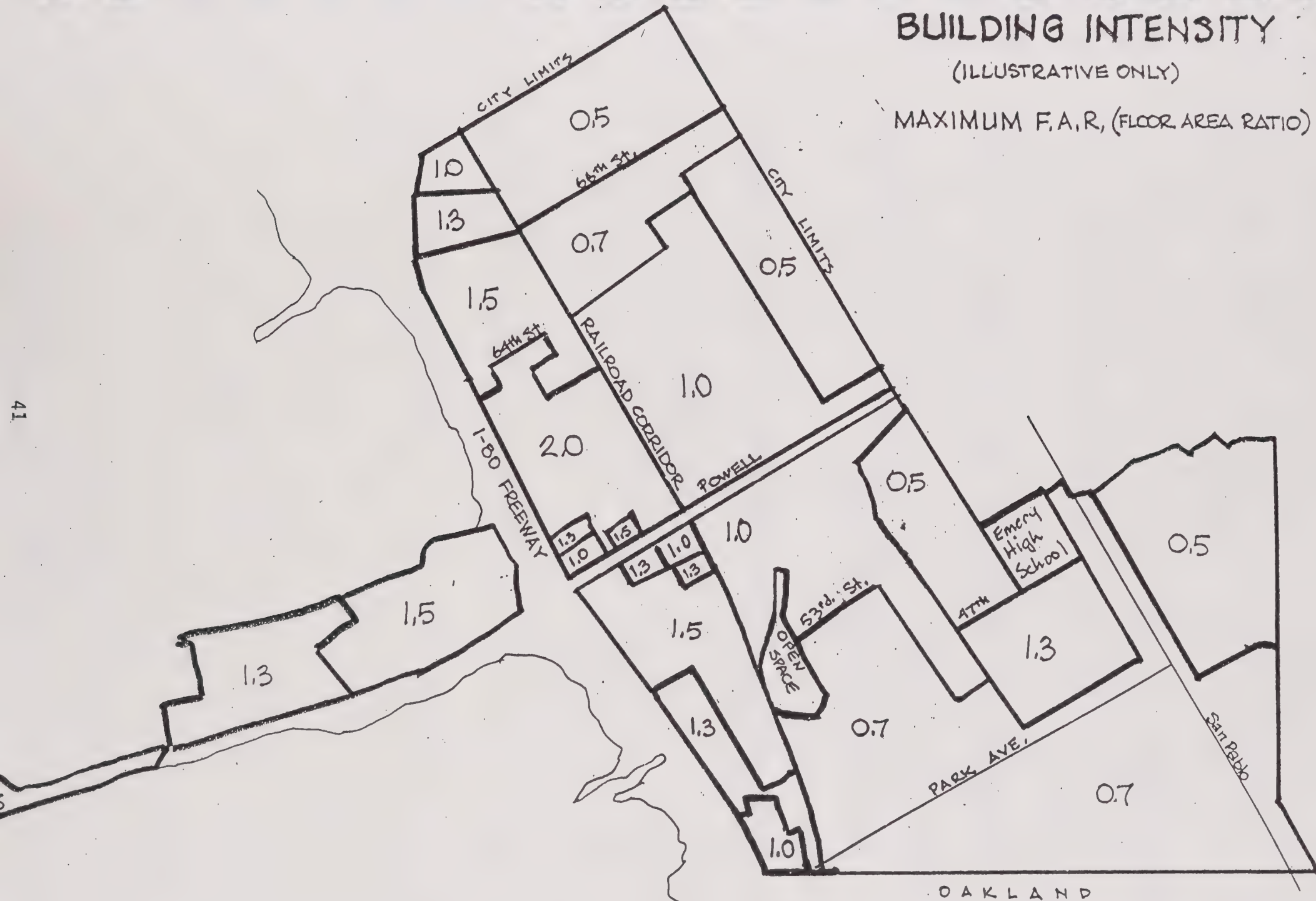
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EMERYVILLE
GENERAL PLAN

BUILDING INTENSITY

(ILLUSTRATIVE ONLY)

MAXIMUM F.A.R. (FLOOR AREA RATIO)



OAKLAND

GLOSSARY

Heritage Buildings:

Buildings constructed in an earlier era which reflect the culture of their time.

Infill Development:

The development of scattered vacant parcels in an otherwise fully developed neighborhood.

Maximum Credible Earthquake:

The largest earthquake likely to occur on a given fault. Estimated at 7.3 (Richter) on the Hayward fault, the closest fault to Emeryville.

Noise Sensitive Land Uses:

Generally considered to be residential areas and certain public and quasi-public facilities such as schools, parks, libraries, churches and hospitals.

CITY OF EMERYVILLE

**HOUSING ELEMENT
OF THE GENERAL PLAN**

SEPTEMBER 1992

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I. INTRODUCTION AND PURPOSE

The provision and preservation of decent, affordable housing is clearly recognized as one of the most pressing issues facing the Bay Area. Local governments, businesses, and many special interest groups all have become housing advocates, as the supply of land has diminished and the price of shelter has risen to the point where most households can no longer own a home. Similarly, the growing recognition of how the balance of jobs and housing directly affects commuting patterns and indirectly influences air quality has reinforced efforts to locate housing near existing job concentrations. These issues underscore the importance of analyzing housing demands from a regional and local perspective. At the local level, the preservation of the housing stock contributes tremendously to neighborhood quality, to civic pride, and to the visual identity of the community. In Emeryville, the relatively large numbers of single-person households, of low-income households, and of artists and craftspeople create special housing needs.

The California Government Code (Section 60302(c)) requires all cities and counties to prepare a "housing element" as part of the city or county general plan. It is in this document that the regional and local housing needs are distilled, and housing programs are outlined. The housing element assesses the community's housing needs; sets objectives and policies toward the maintenance, improvement, and development of housing; and establishes a five-year schedule of actions as required by Government Code Section (65583(c)). This element sets forth an action program for the years 1990-1995.

The programs outlined herein are consistent with state and regional policies to:

- ◆ Provide decent housing for all persons regardless of age, race, sex, marital status, source of income, family composition, or other arbitrary factors;
- ◆ Provide adequate housing by location, type, price and tenure, and;
- ◆ Develop a balanced residential environment including access to jobs, community facilities, and services.

This updated housing element has been designed to meet the State of California Housing Element Law (Article 10.6 of the Government Code). It replaces the previous housing element which was adopted in 1986. The housing goals and policies outlined in the previous housing element are generally considered appropriate. The majority of programs and actions outlined in the 1986 housing element are also considered appropriate; although several were eliminated as they were previously achieved (particularly those relating to the revision of the previous zoning ordinance). Few of the affordable housing production goals were achieved, however, an evaluation of the previous element is included in Chapter VI. Program modifications are incorporated herein to

ensure a better performance for the upcoming planning period. Further, several new programs are recommended for implementation over the subsequent five-year period.

To ensure that all economic segments of the community were involved in the housing element update, a Housing Committee, comprised of representatives of the City and a cross section of citizens was established. The Committee reviewed the draft housing element. In addition, all citizens were provided access to the draft housing element and a widely advertised public hearing was held.

The element was adopted by the City in September 1990. Subsequent comments by the State Office of Housing and Community Development as well as the City's General Plan Advisory Committee have resulted in additional modifications and updates.

II. GENERAL DEMOGRAPHIC AND EMPLOYMENT CHARACTERISTICS

POPULATION CHARACTERISTICS

Prior to 1970, Emeryville had shown little change in its population trends (see Table 1). Only since the recent construction of the Watergate complex in the 1970's, Pacific Park Plaza condominiums in 1984 and Emery Bay Club apartments in 1988, has the population increased. The 1980 census indicated the City's population was 3,712. ABAG's 1990 estimate of the City's population is 5,100, or an increase of 37 percent since 1980.

TABLE 1
EMERYVILLE'S POPULATION GROWTH
1960 - 2005

<u>Date</u>	<u>Emeryville's Population</u>	<u>% Change in Emeryville</u>	<u>% Change in County</u>	<u>Emeryville as % of County</u>
1960*	2,686	—	—	.30
1970*	2,681	0	18	.25
1980*	3,712	38	3	.34
1985*	4,450	20	7	.38
1990**	5,100	15	7	.41
1995**	5,800	14	5	.45
2000**	6,000	3	4	.45
2005**	6,900	15	4	.49

*Estimated, ** Projected

Source: U.S. Census Bureau; Association of Bay Area Governments, Projections - 90.

The population growth forecast for Emeryville in the coming five-year period is slightly greater than that forecast for the County. ABAG projects the City's population will grow from 5,100 in 1990 to 5,800 in 1995, an increase of 13.7 percent. This compares to a 4.6 percent growth rate projected for Alameda County. This growth rate is well in excess of the 5.7 percent population growth forecast for the nine-county San Francisco Bay region over the same period. Emeryville's population is expected to continue expanding, and by 2005 the City is projected to have grown to 6,900, or an increase of 35 percent. In contrast, between 1995 and 2005, the County as a whole is projected to increase by only nine percent.

As indicated in Table 2, projections for Emeryville indicate an addition of 480 new households between 1990 and 1995. This 16 percent increase is significantly greater than the 5.7 percent

growth in the number of households projected for Alameda County. The more rapid rate of household growth compared to population growth is reflective of the general demographic trend toward decreasing household sizes and increased rates of household formation.

Since the 1970's, Emeryville's average household size has been among the smallest in the state. Prior to the construction of the first large, multifamily project in the 1970's, the average household size was 2.41, only slightly smaller than the County's 2.84. In 1980, the City's average household size had declined to 1.74, compared to 2.53 countywide. As shown in Table 2, the current average household size in Emeryville is only 1.69 persons compared to 2.51 in the County. Between 1990 and 1995, ABAG projects household sizes in Emeryville to decrease further to 1.65, with the countywide average declining to 2.48. The declining household sizes are reflective of a regional as well as national trend toward fewer children and a higher incidence of single-person households. The consequence of this demographic trend is a continuing demand for small housing units. However, the City has also established a policy of adding housing that is suitable for families.

EMPLOYMENT TRENDS

Alameda County expects to gain nearly 60,000 new jobs between 1990 and 1995, an increase of nine percent (Table 2). Of these, ABAG projects 350 will be in the City, representing an 2.5 percent increase over the current employment base of 14,120. However, ABAG statistics likely underestimate local job growth significantly. A survey of employment growth projected by the ten largest employers in Emeryville indicate more than 700 new jobs by 1995. Due to the recent surge in employment and the relatively small housing stock, Emeryville currently faces a substantial job/housing imbalance. In response to the demand for more housing in Emeryville, the City has adopted several policies to increase the housing supply in areas of the City previously limited to non-residential development.

Table 3 summarizes the major employers in Emeryville. The largest employer is the Cetus Corporation, a Biotechnology firm with 800 employees. Chiron Corporation, another Biotechnology firm employs 430 and Sybase, a software design and sales company, currently employs 425 and expects its workforce to grow to 1,000 by 1995.

Unlike the County as a whole, Emeryville has a significant number of employees commuting to the City from other areas. Emeryville currently has 10,820 more jobs than it has employed residents. In contrast nearly 40,000 residents commute outside Alameda County for employment.

TABLE 2
EMERYVILLE AND ALAMEDA COUNTY
DEMOGRAPHIC PROFILE

	EMERYVILLE			ALAMEDA COUNTY		
	1990	1995	% CHANGE	1990	1995	% CHANGE
POPULATION	5,100	5,800	13.7%	1,272,000	1,330,800	4.6%
EMPLOYED RESIDENTS (1)	3,300	3,900	18.2%	647,500	707,000	9.2%
EMPLOYMENT (2)	14,120	14,470	2.5%	608,480	675,410	11.0%
NET JOB OUTFLOW (INFLOW) (3)	(10,820)	(10,570)	-2.3%	39,020	31,590	-19.0%
% JOB OUTFLOW (INFLOW) (4)	-327.9%	-271.0%	-17.3%	6.0%	4.5%	-25.9%
HOUSEHOLDS	3,000	3,480	16.0%	491,610	519,520	5.7%
HOUSEHOLD SIZE	1.69	1.65	-2.4%	2.51	2.48	-1.2%
HOUSEHOLD INCOME (5)	\$36,400	\$39,100	7.4%	\$40,100	\$43,000	7.2%

(1) Employed residents live in Emeryville, but do not necessarily work in the City.

(2) Refers to the total number of jobs in Emeryville.

(3) Difference between number of employed residents and employment provided by Emeryville and Alameda County respectively.

(4) Net Job outflow (inflow) as a percentage of employed residents.

(5) Mean household income in constant 1988 dollars.

**TABLE 3
MAJOR EMPLOYERS
CITY OF EMERYVILLE**

COMPANY	# OF EMPLOYEES	TYPE OF BUSINESS
Cetus Corporation	800	Bio-Technology
Chiron Corporation	430	Bio-Technology
Sybase	425	Software Design/Sales
Barbary	250	Steel Construction
CH2M Hill	200	Engineering/Design
Berkeley Farms	192	Dairy
Holiday Inn	150	Hospitality
City of Emeryville	148	Government
Circuit City	85	Electronics Retail
Act 3 Publishing	55	Publishing

Source: Sedway & Associates, April 1990
[emplrs.eca.4.90]

DEPENDENCY RATIO

A useful measure of the demographic profile of a community is its dependency ratio. This ratio indicates the proportion of non-working-aged adults and youth (younger than 18 and older than 65) to the working age population. A high ratio suggests a community must devote more of its resources to education and social services. In Emeryville, this ratio has declined from 1970 to 1980, as both the elderly and the school-aged population has declined and the working-aged population has grown. In 1970, the "dependent" groups represented more than 40 percent of the total population; in 1980, less than 35 percent. The new housing built in Emeryville — predominantly oriented toward middle- and upper-income single households or couples — has tended to reinforce this trend.

HOUSEHOLD COMPOSITION

An unusually large portion of Emeryville's population lives in households of single or unrelated individuals. In 1980, 65.3 percent of the population 15 years or older were unmarried, of which 32.2 percent were single, 22.4 percent divorced, 6.0 percent widowed, and 4.6 percent separated. This prevalence of non-family households is common to all of the City neighborhoods but is most dramatic in the newer residential neighborhoods.

The marital status of the population bears a direct relationship to the types of households found in the City. Of the population living in non-family households, nearly four out of every five were one-person households. The large number of unmarried individuals and one-person households account for Emeryville's population per household of 1.69.

Household types differ sharply among the neighborhoods. Family households represent the living arrangement of 90.2 percent of the North End's population and 68.8 percent of the Triangle's population, the two neighborhoods with the City's single-family homes. In contrast, only 33.4 percent of the Peninsula's and the Bayfront's population were in family households where the housing stock consists predominantly of condominium or apartment units. Consequently, the North End had a higher number of persons per household than the Triangle or the Peninsula and Bayfront (see Table 4).

HOUSEHOLD INCOMES

Income levels as well as other demographic characteristics vary significantly between neighborhoods. Average household incomes in Emeryville are estimated by ABAG to average \$36,400 in 1990 (1988 dollars), compared to \$40,100 for Alameda County. The lower than average income is attributable to the large number of single-person households, and the high percentage of older small homes occupied by lower-income households. While the influx of higher-income households into the City's newer housing stock continues, the City's average

household income is expected to remain below the County average. For example, ABAG projects average household incomes in 2005 to be \$40,900 (in constant 1988 dollars) for Emeryville compared to \$46,900 countywide. The lower average household income in Emeryville is principally attributable to the smaller household sizes.

The Bayfront/Peninsula areas were the most affluent in 1980, with average household income nearly \$5,000 above the City average. In contrast, the Triangle and the North End neighborhoods accounted for 89 percent of the City's low-income families and 65 percent of its moderate-income families. The disparity in incomes among the different neighborhoods parallels the differences in the types of jobs held by the residents, as well as housing type. The majority of employed residents in the North End and Triangle were in manufacturing and support occupations. In the newer areas, the majority were employed in managerial and professional specialties. As discussed more fully in a subsequent section, the City's housing stock consists primarily of two older, primarily single-family neighborhoods (the Triangle and the North End) and newer multifamily housing principally located in the areas known as the Bayfront and Peninsula.

Disaggregated by ethnicity, the average income of white families was \$29,576. The average income for black families (\$14,817), was 50.1 percent of white family income. The average income of Hispanic families (\$13,457) was 45.5 percent of white family income.

AGE OF POPULATION

The City's age characteristics are summarized in Table 4 below:

TABLE 4

SELECTED POPULATION CHARACTERISTICS

BY NEIGHBORHOOD, 1980¹

<u>Characteristic</u>	<u>North of Powell²</u>	<u>Triangle</u>	<u>Bayfront/ Peninsula</u>	<u>Citywide</u>
Population	798	1,414	1,502	3,714

Source: 1980 Census of Population and Housing, Summary Tape File 3A.

¹Statistics broken down by census block numbers which roughly approximate the identified neighborhoods.

² See Figure 3. Neighborhoods and Districts

The above data are provided as general information only. Recent changes in the housing stock may limit the accuracy of the above statistics. Updated data will be available upon completion of the 1990 Census.

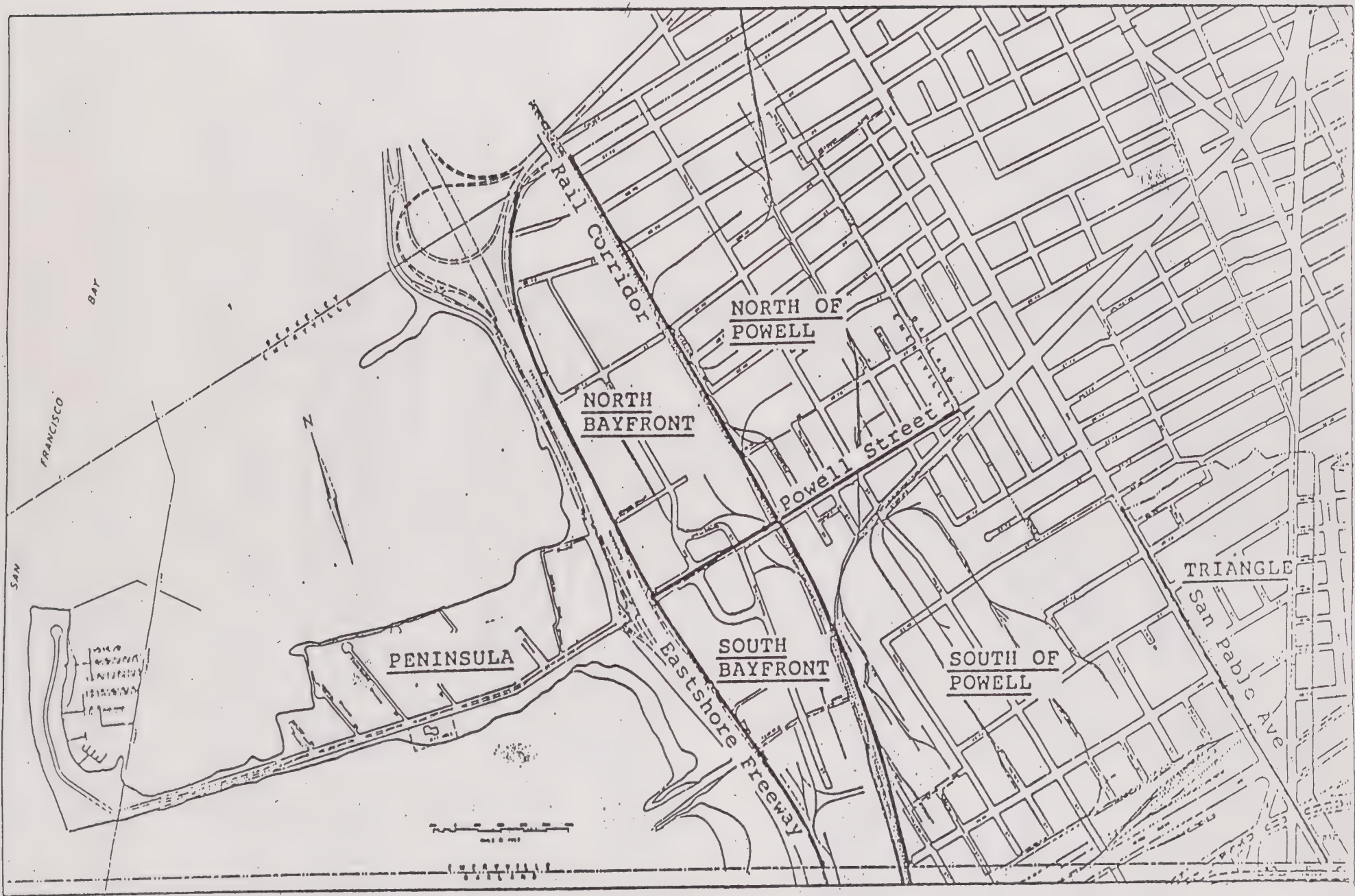


FIGURE 1': NEIGHBORHOODS AND DISTRICTS

FMFRYVILLE GENERAL PLAN



<u>Characteristic</u>	<u>North of Powell South of Powell</u>	<u>Triangle</u>	<u>Bayfront/ Peninsula</u>	<u>Citywide</u>
Age				
% under 18	41.0%	21.0%	0.4%	17.0%
% over 65	5.1%	13.5%	5.5%	8.5%
Dependency Ratio	0.86	0.53	0.06	0.34
Household Composition				
% of Population				
over 15 Unmarried	63.6%	63.8%	67.2%	65.3%
% of Population				
in Families	90.2%	68.1%	33.4%	58.7%
Household Size	2.9	2.0	1.3	1.7
Ethnicity				
% White	40.5%	40.6%	84.7%	58.4%
% Black	55.5%	32.7%	9.5%	28.2%
% Other	4.0%	26.7%	5.8%	13.4%

Significantly, more than 40 percent of the North End's population was under 18, and less than one percent of the Bayfront's and the Peninsula's population fell into this category. The Triangle contained a majority of the community's elderly population. As a result, the dependency ratios for the North End and the Triangle are high. The Watergate and Pacific Park Plaza projects, which attracted large numbers of working-aged adults, brought about profound social changes to the community, by significantly increasing the population and its age structure.

ETHNIC COMPOSITION

Emeryville is an ethnically diverse community. In 1980 ethnic minorities represented 46.3 percent of the City's population, up from 42.6 percent in 1970. Whites comprised 58 percent of the population, blacks 28 percent, Asians eight percent and others five percent. Approximately nine percent of the population indicated it was of Spanish origin. The distribution of ethnic backgrounds by block groups shows that ethnic minorities comprise the majority of the population in the North and South of Powell districts and the Triangle. (See Table 4.)

III. HOUSING AND NEIGHBORHOOD CHARACTERISTICS

HOUSING PRODUCTION TRENDS

In 1988, 12 percent of Emeryville's housing stock was comprised of single-family homes, 99 percent of which were developed prior to 1980. As indicated in Table 5, only six individual homes were added as of 1988. In contrast, 1,133 multi-family units were added between 1980 and 1989. Two large projects, Pacific Park Plaza and Emery Bay Club & Apartments, accounted for over 90 percent of the added multi-family units. In addition, a number of industrial buildings have converted to providing 208 live/work spaces.

Approximately 850 additional units currently are under preliminary review, including a 400-unit apartment project, and a 400-unit condominium project. Several other projects are anticipated to be initiated for preliminary discussion in the next several months. One unique project undergoing planning review is a 12-unit co-housing project. Co-housing is a cooperative living arrangement that provides a participatory design and some shared facilities.

HOUSING STOCK CHARACTERISTICS, PRICES AND RENT LEVELS

Emeryville has four major housing types: older single-family homes (Triangle/North End), large condominium complexes (Pacific Park Plaza and Watergate), large apartment complexes (Emery Bay Club & Apartments) and live/work space.

Single-Family

The majority of single-family homes are found in the Triangle and North End neighborhoods located in East Emeryville. In 1988, the average sales prices for homes in the East Emeryville area were \$74,000 for two bedrooms or less, \$105,000 for three bedrooms and \$124,900 for four bedrooms, resulting in an average sales price of \$81,200³. Between September 1988 and December 1989, 23 homes sold in East Emeryville, at an average price of \$131,000. The prices ranged from a low of \$65,000 to a high of \$285,000, with half of the homes selling for less than \$100,000 and only two homes for more than \$150,000. Between 1980 and 1988, the average home prices increased 54 percent for two or less bedrooms, 69 percent for three bedrooms and 73 percent for four bedrooms.

³Reorganization and Expansion Assessment Report, May 1989. Submitted by Neighborhood Reinvestment Corporation.

TABLE 5

HISTORIC GROWTH OF HOUSEHOLD AND HOUSING SUPPLYCITY OF EMERYVILLE

1. TOTALS

HOUSING UNITS

YEAR ENDING	HOUSEHOLD POPULATION	# HSHLDS	TOTAL # HSG UNITS	% VACANT	SINGLE	MULTI	MOBILE HOME (1)
1980	3,895	2,262	2,569	12.0%	450	2,112	7
1981	3,869	2,252	2,569	12.3%	450	2,112	7
1982	3,871	2,244	2,571	12.7%	450	2,114	7
1983	3,929	2,285	2,613	12.6%	451	2,154	8
1984	4,164	2,434	3,200	23.9%	455	2,737	8
1985	4,625	2,715	3,203	15.2%	456	2,739	8
1986	4,639	2,725	3,254	16.3%	456	2,739	8
1987	4,927	2,893	3,254	11.1%	456	2,790	8
1988	5,032	2,955	3,681	19.7%	456	3,217	8
1989	NA	NA	3,709	NA	456	3,245	8
					12%	87%	0%

2. ADDITIONS

HOUSING UNITS

DURING THE YEAR	HOUSEHOLD POPULATION	# HSHLDS	TOTAL # HSG UNITS	% VACANT	SINGLE- FAMILY	MULTI- FAMILY	MOBILE HOME
1980							
1981	(26)	(10)	0	0.4%	0	0	0
1982	2	(8)	2	0.4%	0	2	0
1983	58	41	42	-0.2%	1	40	1
1984	235	149	587	11.4%	4	583	0
1985	461	281	3	-8.7%	1	2	0
1986	14	10	51	1.0%	0	51	0
1987	288	168	0	-5.2%	0	0	0
1988	105	62	427	8.6%	0	427	0
1989	NA	NA	28	NA	0	28	0
TOTAL	1,137	693	1,140	-0.9%	6	1,133	1

Average

1980-88	142	87	139	1.09%	1	138	0
					1%	99%	0%
Average	136	80	159	1.5%	0	159	0
1986-88					0%	100%	0%

(1) Also includes any occupied units which do not fit into the other categories.

Sources: California State Dept. of Finance, Sedway & Associates.

Note: Population estimates reported by the State Dept. of Finance are actually as of January 1st of each year, but for purposes of the above analysis are treated as if they are on December 31st of the prior year.

Although prices have risen significantly, Emeryville's older homes are still quite affordable compared to the rest of the Bay Area, where the median home price was \$261,159 as of February 1990. The City's single-family resale prices are also lower than nearby cities of Berkeley, Albany, and Kensington, where average home resale prices ranged from \$244,389 to \$301,954 (See Table 6). Nonetheless, several factors including the City's rapidly improving schools, growing identity as a City with a strong art presence, and the relative affordability of housing stock are likely to be reflected in more rapid increases in home prices in the coming five-year period.

Condominiums

The Emeryville condominium market is comprised of two major projects: Watergate, which is located on the Peninsula area, and Pacific Park Plaza, which is located in the Bayfront area. As illustrated in Table 7, units at Watergate range in price from \$75,000 for a studio to approximately \$290,000 for a penthouse. Units at Pacific Park Plaza currently range from \$103,000 for a one-bedroom to \$550,000 for a penthouse.

Approximately 66 percent of the units at Pacific Park Plaza and 45 percent of the units at Watergate are rented. Current rents at Watergate are \$600 to \$700 for a studio, \$675 to \$1,000 for a one-bedroom and \$900 to \$1,400 for a two-bedroom. Rents at Pacific Park Plaza range from \$750 to \$975 for a one-bedroom, \$1,100 to \$1,700 for a one-bedroom plus den, and \$1,200 to \$1,900 for a two-bedroom. The 112-unit Emery Bay Village condominium project has one-, two-, three- and four-bedroom units. Recent sales prices for one- and two-bedroom units are estimated to sell for an average of about \$105,000 to \$150,000.

Apartments

Emery Bay Club & Apartments, a 424 unit project built in 1988, is located in the Bayfront neighborhood. Currently, studios rent for \$665, one-bedroom apartments range from \$765 to \$1,025 and two-bedroom apartments range from \$1,010 to \$1,040. These rents are comparable with those achieved at the two condominium projects. Amenities at this complex include a swimming pool, jacuzzi, exercise room and playground.

In addition to rentals at the Emery Bay Club and Apartments, Watergate, and Pacific Park Plaza, approximately 850 single-family homes and smaller multifamily projects are rented in East Emeryville⁴. According to a five week survey of Sunday Tribune listings conducted by the City in 1989, ten different units were listed for rent. The advertised rents were as follows: \$355 for a studio, \$350 and \$425 for a one bedroom apartment, and \$625 for a two bedroom. The recently renovated Emery Apartments (Roxie Hotel) has 10 apartment units renting for about \$420 for a one-bedroom, and \$485 to \$550 for a two-bedroom. The 36-unit Emery Glen apartment project was developed in 1982 using the Section 8 rental subsidy program. Until recently, there were two residential hotels renting rooms on a weekly basis. The Ritz, located on San Pablo Avenue, has 35 rooms (without kitchens). Rooms are rented for \$90 per week. The 33-room Key Hotel was recently closed down. Rents had varied from \$65 to \$95 per week, depending upon the room.

⁴Based on information from the 1980 Census.

TABLE 6
ANNUAL AVERAGE HOME PRICES (1)
SELECTED ALAMEDA COMMUNITIES AND BAY AREA

COMMUNITY	1985	Percent Increase 1985-86	1986	Percent Increase 1986-1987	1987	Percent Increase 1987-1988	1988	Percent Increase 1988-1989	1989
Albany	139,948	4.9%	146,803	12.1%	164,564	22.9%	202,268	20.8%	244,389
Berkeley	168,108	17.9%	198,223	7.2%	212,422	15.4%	245,042	12.6%	275,801
Kensington	195,939	3.6%	203,068	11.5%	226,475	38.3%	313,152	-3.6%	301,954
Bay Area(2)	146,451	14.4%	167,612	4.4%	175,064	33.6%	233,921	10.1%	257,535

(1) Based on Multiple Listing Service (MLS) sales of single-family homes, townhomes, and condominiums.

MLS data includes many, but not all, residential sales. It does not include sales of many newly constructed homes, particularly high end houses.

(2) Median home prices based on December MLS sales data from the following boards: Berkeley, Contra Costa, Los Altos-Los Gatos-Saratoga-Mountain View-Sunnyvale, Marin, Palo Alto, San Jose, Southern Alameda, Oakland, and San Francisco

Source: Berkeley Board of Realtors; California Board of Realtors; Sedway & Associates, January 1990.
[prices.eca.4.90]

TABLE 7

**LARGER MULTIFAMILY PROJECT HOME PRICES/RENTS
CITY OF EMERYVILLE**

	Total # Units	Unit Plan (Bd./Ba.)	Unit Size (Sq.Ft.)	Age of Building	Rent	Purchase Price	Vacancy Rate	Comments
APARTMENTS:								
Emery Bay Club & Apartments	424	Studio	565	1988	\$665	NA	4%	Project has among the highest rent levels in the East Bay and yet leased up very rapidly (35 units/month).
		1/1	658-861		\$ 765-1025	NA		
		2/2	985-1104		\$1010-1040	NA		
CONDOMINIUMS:								
Watergate	1,249	Studio	470	1971	\$660-700	\$75,000-\$100,000	2-3%	55% owner-occupied. Condo fees: \$123-\$240 depending on unit size. Generally 18 units sold per month. Appreciation of 15%-25% in last year.
		1/1	700-800		\$675-1,000	\$85,000-\$200,000		
		2/2	950-1,100		\$900-1,400	\$149,000-\$240,000		
		Penthouse	1,500		NA	\$289,000 - up		
Pacific Park Plaza	583		634-768	1981	\$750-975	\$103,000-\$165,000	NA	34% owner occupied. Condo fees: \$189-\$289 depending on unit size. Appreciation of 15% in last year. Waiting list of 20 people for Penthouse.
		1/1	1,440		1,100-1,700	\$170,000-\$350,000		
		1+/1	1,369		1,200-1,900	\$290,000-\$550,000		
		2/2	NA		NA	\$290,000-\$550,000		
		Penthouse						

Source: Sedway & Associates, April 1990.
[hsgstck.eca.4.5.90]

Live/Work

Artists are only one category of people who desire to live and work at home. Living in urbanized areas has become increasingly acceptable and desirable to a larger number of people. However, the arts community has characteristics which merit special consideration in terms of housing and other essential needs: 1) the special cultural values which artist and art bring to Emeryville, and 2) the fact that producing art, unlike some other economic activities, is not a high profit-generating activity and will tend to be displaced if forced to compete in the open market place on the same footing as other businesses.

Emeryville has adopted the premise that the artist community is an integral part of the City. The arts and crafts industry has played an important role in Emeryville's redevelopment process. Artists were among the first to reuse the large industrial facilities that have been vacated by traditional manufacturing firms. Attracted by inexpensive rents, the loft spaces and good proximity to UC Berkeley, many of these arts and crafts people created a market for space in restored buildings. This demand has increased the pace at which buildings are being renovated and helped smooth the transition between the older industrial land uses and more modern ones.

Unlike other manufacturing activities, the arts and crafts industry has tended to cluster in specific areas of the City. The major live/work projects in the City, listed on Table 8, are generally located in the North of Powell and South of Powell Districts. This spatial concentration is a result of where space has been available and the natural tendency for artists to congregate. Space requirements vary with the type of art being produced. Painters, small studio photographers, etc. can generally operate effectively with about 1,100 gross square feet. Sculptors working with large pieces require more space. In the future, as space in the old manufacturing buildings becomes more desirable for office use, there will be increasing pressure to displace the artists.

Units at the Artists Co-op, a limited equity live/work condominium, sell for approximately \$8,000 to \$30,000 depending on size and location in the building. The sales prices are low, due in part to low-interest loans provided by the City. Of the 59 units, at least 51 percent are set aside for moderate to low income households. An additional vacant building near the Artists' Co-Op may be converted to live/work space in the future. The remaining 149 live/work units are all rentals, with rents of about \$.70 to \$.80 cents per square foot. The Hollis Street Project has some less expensive units (\$.48 per square foot) but they do not have any exterior windows. Vacancy rates are very low at all of these projects. Of the 208 live/work units identified, only one unit was vacant. In addition, most projects have waiting lists and very few turnovers. This suggests there is a strong demand for additional live/work units in Emeryville.

TABLE 8

//
LIVE/WORK PROJECTS
EMERYVILLE

Project	Location	Type	# of Units	Unit Size (Sq. Ft.)	Ceiling Height (Feet)	Yr Built/Renovated	Rent/Purchase Price	Comments/Improvements
EMERYVILLE:								
Artists' Co-op	1420 45th Street 4250 Horton Street	Condo	59	600-2,000	17'	1970	\$8,000-\$30,000	Common bathroom and kitchen; some owners have installed facilities in units.
Bailey Building	61st & Doyle	Apt	14	1,000-2,100	25'	1986	\$.85/sq. ft.	Bathroom standard, tenants may add kitchens. Mixed-Use project. Includes Hoffman Gallery.
Besler Building	4053 Harlan Street	Apt	51	827-1,787	14'	1986	\$.80/sq. ft.	Bathrooms and kitchen hookups standard. Mixed-Use project.
Emeryville Business Center	1250 45th Street	Apt	25	1,000-1,700	17-20'	1990	\$.85/sq. ft.	Units include full bathroom and kitchen. Expect to complete Phase I (11 units) 8/90. Mixed-Use project (Light industrial).
Hollis Street Complex	6221 Hollis Street	Apt	30	avg. 1,110	11'-40'	1979	avg \$.70/sq. ft.	Bathrooms and kitchens standard. Mixed Use project.
Hollis Street Project	61st and Hollis Street	Apt	29	933-2,520	20'	1983	\$.48 -.80/sq. ft.	Bathroom and kitchen sink (no appliances) standard. Mixed-Use project; 21 units being used as live/work. Prices vary depending on size and location (some units have no exterior windows.)

VACANCY RATES

Based on information from the Department of Finance, the average vacancy rate in Emeryville was only 1.5 percent during 1986 to 1988. Although exact vacancy rates for single-family homes are not available, only 20 single-family residences changed hands from September 1988 to September 1989, suggesting that the single-family market in Emeryville has a very low vacancy rate. As illustrated in Table 7, vacancy rates for multi-family housing ranges from two to three percent at Watergate and four percent at the Emery Bay Club and Apartments. A market equilibrium generally provides for a vacancy rate of five percent to allow for a normal turnover of units. Thus, these statistics indicate a strong demand for both single-family and multifamily housing in Emeryville.

NEIGHBORHOOD PROFILES

Emeryville is divided into six districts: the Triangle; North of Powell; South of Powell; North Bayfront; South Bayfront; and the Peninsula. The City is more commonly defined as having three major areas: the Peninsula; the Bayfront; and East Emeryville, which encompasses the other smaller neighborhoods. The Peninsula, located to the west of Interstate 80, is characterized by the high-rise office buildings of the Watergate Towers and Holiday Inn, the 1,249 unit Watergate housing complex and the Emeryville Marina. The Bayfront, located between Interstate 80 and the railroad tracks, is characterized by several new office complexes, a regional shopping center, Pacific Park Plaza condominiums and Emery Bay Club and Apartments. East Emeryville, the area east of the railroad tracks, consists of older light industrial buildings, live/work projects, and two small residential neighborhoods, the Triangle and the North End.

The Triangle is a predominantly residential neighborhood east of San Pablo Avenue with a strip of commercial and mixed-use buildings located along San Pablo Avenue. The largest concentration of older homes are located in this neighborhood; according to the 1980 Census, approximately 64 percent of the housing stock was built prior to 1940. This neighborhood also has a higher density than the other East Emeryville neighborhoods, North End, with 55 percent of residential structures having three or more units. The neighborhood is predominately low-income and is home to many of Emeryville's senior citizens (the Senior Center is located here).

East Emeryville west of San Pablo generally consists of single-family homes and duplexes. Similar to the Triangle, many of the homes were built prior to 1940; however, the addition of Emery Bay Village and Emery Glen added 112 condominiums and 36 apartments respectively to the housing stock. As of 1980, 40 percent of the residential structures had three or more units. The majority of the households in the neighborhood are low-income.

HOUSING CONDITIONS

According to the 1980 Census, 54 percent of Emeryville's housing stock was built prior to 1940. A number of these homes are small by today's standards and are of fair to poor construction quality. Furthermore, while housing conditions in the newer neighborhoods are generally good, Emeryville's older neighborhoods evidence extensive signs of physical deterioration.

During the month of April 1990, 551 residential buildings were surveyed in the Triangle and the North End communities. The survey evaluated five building components including: roof, porches and stairs, paint and exterior surfaces, windows, and doors. An overall deficiency rating of minor, moderate, substantial or dilapidated was assigned to each structure based upon a qualitative evaluation of each of the building components.

The survey results are highlighted in Table 9. As shown, 56 percent (309 units) of the residential buildings in these two neighborhoods show signs of requiring some level of repair. Of those, 73 percent (227 units) appear to require minor repairs such as painting, 19 percent (59 units) require moderate level repairs, and seven percent (21 units) require substantial repairs. Only two homes appeared to require demolition, although the interiors were not inspected. Further, a portion of those with substantial exterior problems may not be able to be rehabilitated, or the cost of rehabilitation may be more expensive than the replacement cost. The results of this survey generally corroborate earlier housing surveys.

The results of the housing conditions survey will be useful in targeting the City's rehabilitation programs to the areas most in need. According to the Redevelopment Agency, of the single-family homes in East Emeryville, 31 percent in the Triangle and 50 percent in the North End are owned by absentee landlords. This information will be incorporated into the outreach strategies used to promote below-market rate rehabilitation loan programs. One of the beneficial features of the existing program is that absentee landlords can participate as long as the tenants are low- or moderate-income.

POTENTIAL LAND AVAILABLE FOR HOUSING

As of May 1990, there were approximately 15 vacant/underutilized residential in-fill lots in East Emeryville. The location of these lots is illustrated in Figure 1. These lots constitute about 1.74 acres and can accommodate approximately 38 units. The Redevelopment Agency is presently actively seeking to acquire four of the lots for affordable in-fill housing.

TABLE 9

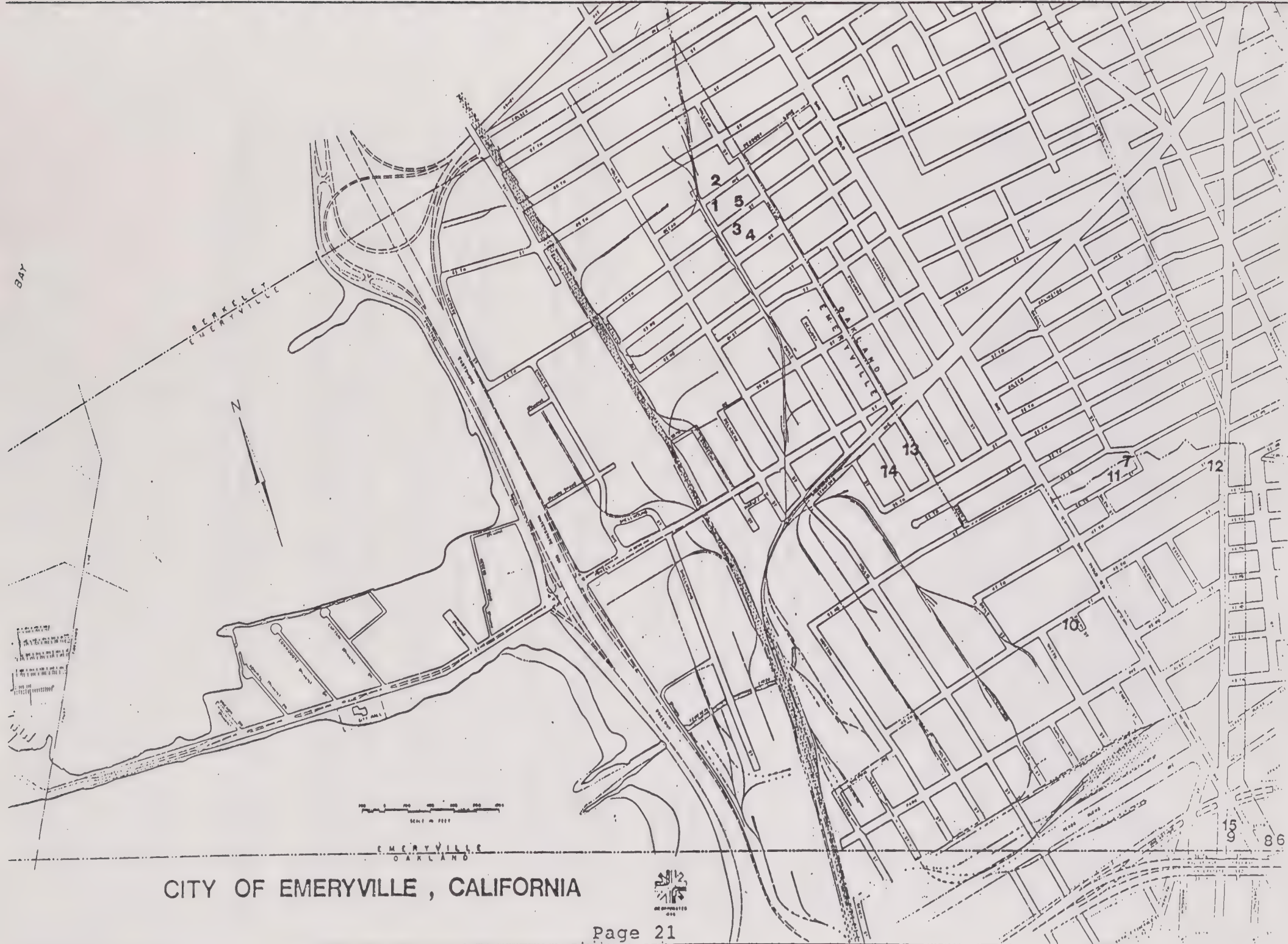
CITY OF EMERYVILLE
HOUSING CONDITIONS SURVEY (1)
SELECTED, OLDER NEIGHBORHOODS

Neighborhood	Buildings Surveyed	# In Need of Repairs	% In Need of Repairs	Repairs Needed, by Building Component (Of Homes Needing Repairs)					Level of Deterioration (2) (Of Homes Needing Repairs)			
				Roof	Porches & Stairs	Paint/Exter. Surfaces	Windows	Doors	Minor	Moderate	Substantial	Dilapidated
North End	307	136	44%	39 (29%)	38 (28%)	115 (85%)	27 (20%)	7 (5%)	95 (70%)	33 (24%)	7 (5%)	1 (1%)
Triangle	244	173	71%	51 (29%)	25 (14%)	167 (97%)	42 (24%)	32 (18%)	132 (76%)	26 (15%)	14 (8%)	1 (1%)
Total	551	309	56%	90 (29%)	63 (20%)	282 (91%)	69 (22%)	39 (13%)	227 (73%)	59 (19%)	21 (7%)	2 (1%)

NOTES:

- (1) Based on walking survey conducted by Sedway & Associates during April 1990
 (2) Minor: three or less minor problems; Moderate: four or more minor problems or one major problem;
 Substantial: two or more major problems or two or less critical problems; Dilapidated: three or more critical problems

Source: Sedway & Associates, April 1990
 [hsgsurv.eca.4.90]



CITY OF EMERYVILLE, CALIFORNIA



In addition to these smaller residentially zoned in-fill sites, there are currently six larger underutilized sites in which residential development is contemplated. The location of these sites is illustrated in Figure 2. Some of these sites may require a zone and general plan amendment or a use permit to accommodate housing. In fact, three of the six underutilized parcels are currently undergoing planning review and are anticipated to contribute about 850 to 1,000 new units of housing in the next five years. Included is the 40-acre Catellus site located on the southern border of the City which is anticipated to include 400 to 600 market-rate apartments; the 16-acre Del Monte site in the South of Powell area which is projected to include about 400 condominium units; and the 50-unit low-income senior project sponsored by the Redevelopment Agency, and developed by a non-profit housing developer for a parcel on San Pablo Avenue at 43rd Street. The senior housing project is approved, with its completion anticipated by mid 1992. A second phase, adding an additional 25 units of market rate senior housing, is contemplated. Developers studies for the Del Monte site have been submitted to Planning with approval anticipated to occur within the next year. The Catellus site is under review by the City. A fourth site, located directly east of the Emery Bay Club and Apartments is anticipated to be developed as Emery Bay Club and Apartments II with up to 270 units. This site is zoned medium density residential. The Redevelopment Agency is planning to jointly develop the site with a non-profit developer. Of the 270 units possible, an estimated 40% are proposed as affordable units for very low- and low-income households. The owner of a 2.5 acre site adjacent to the Holiday Inn has submitted an application to Planning for the development of a 300 unit congregate care facility. The owner of a property on Christie Avenue is considering the development of up to 200 units. These two properties are currently zoned mixed use in which residential uses are permitted with a use permit.

Table 10 lists the in-fill lots illustrated in Figure 1 and depicts their size, allowable density and number of units which could be built. All of these lots are zoned medium residential and would not require zoning changes to enable residential development consistent with their environment. All of these lots also have available public services and facilities.

Table 11 describes each large parcel in detail, including its existing and proposed density, its size, allowable density, number of units which could be built, availability of public services and facilities, whether discretionary action is necessary to facilitate development and timeline to accomplish, number of units planned and project status.

There are several other non-residential parcels of land that have underlying residential zoning. These properties may have some long-term residential potential. However, the reuse of these parcels for residential uses is not anticipated to occur during the forthcoming five-year planning period.

Additional underutilized land in the South Bayfront and East Emeryville is designated for mixed-use development. Housing would be a desired use as part of a mixed-use development.

Because of the flexibility available to developers in designing their projects, and the uncertainty over whether housing will be incorporated in these areas, it is not feasible to project the number of additional units that may be built on these sites. Similarly, there is an effort on the part of the Land Use Plan to provide residential opportunities for people, especially artists, to live in their work places, primarily in the City's industrial areas. Depending upon the financial assistance that can be secured to create live/work space, this use of typically non-residential buildings represents a major potential source of additional housing units.



FIGURE 3: NEIGHBORHOODS AND DISTRICTS

EMERYVILLE GENERAL PLAN

SCALE IN FEET 0 200 400 600 800 1000

TABLE 10

IN FILL LOTS IN CITY OF EMERYVILLE

All of the lots listed below are zoned R-M (Medium Density Residential), do not require zoning changes residential development and have available public services and facilities.

<u>NUMBER ON MAP</u> (Figure 1)	<u>SIZE</u>	<u>DENSITY ALLOWABLE</u>	
		(permitted)	with conditional use permit
1	6420 sf	3 units	7 units
2	8543 sf	8 units	9 units
3	3745 sf	2 units	4 units
4	7000 sf	3 units	7 units
5	3566 sf	2 units	4 units
6	2146 sf	1 unit	2 units
7	3384 sf	2 units	4 units
8	4597 sf	2 units	4 units
9	2000 sf	1 unit	2 units
10	7500 sf	3 units	8 units
11	4540 sf	2 units	4 units
12	8123 sf	4 units	8 units
13	4300 sf	2 units	4 units
14	4000 sf	2 units	4 units
15	1795 sf	1 unit	2 units

TOTAL POTENTIAL UNITS		38 units	73 units
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TABLE 11: Underutilized Parcels

SITES

	CATELLUS	DEL MONTE	EMERYVILLA	EBC & A II	ST. ALBAN'S (HOLIDAY INN)	CHRISTIE
SIZE, Sq. Ft. Total Parcel	1,743,400 (480,000 Housing)	522,720	75,000	196,850	91,476	300,234 (6 Parcels)
EXISTING ZONING	LI	RM/NC	GC	RM	MU	MU
PROPOSED ZONING	Change to MU	Change to MU	Obtain CUP	Change to RH	Allow higher density (Gen. Plan amend.)	No change needed
DENSITY (with existing zone) (DU/Acre)	NONE	20 45 w/CUP	20 45 w/CUP	20 45 w/CUP	45 60 w/CUP	45 60 w/CUP
(with zone change)	45 60 w/CUP	20 45 w/CUP	NONE NEEDED	45 108 w/CUP	45 108 w/CUP	NONE NEEDED
# UNITS ALLOWED (with existing zone)	NONE	240 540 w/CUP	34 77 w/CUP	90 203 w/CUP	95 126 w/CUP	457 610 w/CUP
with zone change	503 671 w/CUP	240 540 w/CUP	NONE NEEDED	203 486 w/CUP	95 227 w/CUP	NONE NEEDED
PUBLIC SERVICES	Yes	Yes	Yes	Yes	Yes	Yes
TIME FRAME	Under Evaluation	Under Evaluation	Completion Date, 1992	Projected start date March 1992	Under Evaluation	N/A
# UNITS ANTICIPATED (AFFORDABLE)	400-600 (20% low/mod)	400 (20% low/mod)	75 (50 very low, 25 market rate)	270 (55, very low, 55 lower, 160 moderate)	300 (20% low/mod)	200 (3 parcels) (20% low/mod)
PROJECT STATUS	Pre-Application in	Preliminary plans under review	Completion mid-1992	Application in to Planning Commission	Application in to Planning Commission EIR underway	No formal proposal submitted to date

IV. SPECIAL HOUSING NEEDS

Within every community there are specific population groups which have specialized housing needs. This section of the housing element discusses the special housing needs of the elderly, female-headed households, disabled, homeless, large families and farmworkers living in Emeryville.

ELDERLY

Emeryville has historically had a smaller percentage of seniors than the County as a whole. In 1980, 8.8 percent of Emeryville's population was over 65, compared to ten percent of Alameda County's population. The City's elderly population has increased in real numbers but declined as a percentage of the total population. In 1980, 327 residents were over the age of 65. According to the Alameda County Department on Aging's 1990 projections, the elderly population increased to 465 residents, or 8.2 percent of Emeryville's total population.

In 1980, nearly half of the total elderly population lived alone. Additionally, almost one out of every five elderly persons lived in poverty. The table below shows the 1980 distribution of the total elderly population, the single elderly, and the elderly in poverty, by neighborhood. About 60 percent of the City's elderly lived in the Triangle, and of the elderly who lived in poverty, 90 percent could be found in this neighborhood.

TABLE 12
INCIDENCE OF ELDERLY BY NEIGHBORHOOD, 1980

	<u>North of Powell</u> <u>South of Powell</u>	<u>Triangle</u>	<u>Bayfront,</u> <u>Peninsula</u>
Distribution of elderly population	13.1%	60.8%	26.1%
% elderly population in neighborhood	5.2%	13.3%	5.5%
Distribution of elderly in poverty	0	90.0%	10.0%
% elderly in poverty in neighborhood	0	20.3%	7.5%
Distribution of single elderly	13.7%	51.0%	35.3%

Source: 1980 Census of Population and Housing.

The Emeryville Senior Center currently has 1,200 members, of which 302 are residents of Emeryville. Of the Emeryville members, 43 percent live in the Triangle, 15 percent live in the North End, 34 percent live in Watergate (the Peninsula) and eight percent live in the Bayfront neighborhood. The Center also provides discount taxi service to all members, of which 145 elderly and disabled individuals participate, including five wheelchair-bound individuals. The Center also serves approximately 45 hot meals a day to its members.

As of May 1990, Emeryville did not have any elderly board and care homes, congregate care facilities or skilled nursing centers. However, the City is adjacent to the larger cities of Berkeley and Oakland which provide a significant number of elderly housing units. The City's first senior housing project, Emery Villa, a 50-unit low-income elderly apartment complex should be completed by mid 1992. The demand for this project is expected to be enormous; a similar complex in Oakland received 140 applications in three weeks for 55 apartments while still under construction. An additional 25 units of market rate senior housing may also be constructed in conjunction with the 50 subsidized units.

Oakland and Berkeley provide a significant number of elderly housing units. Oakland has approximately 2,500 board and care beds, 3,338 subsidized apartments for the elderly and 1,612 skilled nursing beds. In addition, a substantial number of subsidized senior projects are proposed in Oakland. Berkeley has 250 board and care beds for the elderly, 616 subsidized apartment units and 322 skilled nursing beds. The subsidized apartments in these cities have two- to three-year waiting lists. Although it is uncertain how many of the residents are from Emeryville, there is a need for additional affordable housing for the elderly throughout the County.

The cities of Oakland and Berkeley also fund SHARE, a referral and roommate service, which helps residents of those cities find affordable housing and/or roommates. Many elderly people are interested in renting out rooms in their homes to ease the financial burden of ownership or because they do not want to live alone. Shared housing programs can provide affordable housing to a renter and income and companionship to a homeowner. SHARE has received a number of requests from Emeryville residents but at this time they are not eligible for the program. The City of Emeryville may want to consider becoming affiliated with this program. It is a relatively easy way to provide housing options to lower- and moderate income residents. Because of Emeryville's small size, it is not crucial that housing within the city limits address the range of housing needs of the elderly. However, Emery Villa, in conjunction with a shared housing program could benefit a significant number of the elderly population.

HOMELESS

With rising housing costs and reductions in social services by federal, state and county agencies, the issue of homelessness has become a serious problem in the Bay Area. Individuals without shelter include transients, persons recently released from institutions, persons who have been evicted without sufficient resources to find replacement housing, refugees, battered women and their children.

Based on an unduplicated count conducted in a limited number of shelters in the County, the Emergency Services Network found that 2,149 individuals sought shelter during a one week period in February 1989, of which approximately 11 were from Emeryville. Adjusting for the number of shelters and County departments that did not participate in the count, Emergency Services Network estimates that 54 people from Emeryville are homeless at any one time. ESN uses a multiplier of five to determine the full extent of homelessness. This is based on several years of study which has confirmed that only one-fifth of those without homes seek assistance from a homeless shelter. Of those who sought shelter approximately 75 percent were turned away. Further, based on this survey, the number of homeless seeking shelter has increased 126 percent since 1985.

Of those seeking shelter in the County, 33 percent were single men, 14 percent were single women, and 53 percent were families. Further, it is estimated that 34 percent of the homeless are under the age of 19, 30 percent are employed, 25 percent are disabled mentally and 5 percent are disabled physically. Some service workers feel that the situation is even worse than the shelter statistics imply because many of the homeless live in cars, abandoned buildings, on the street, or double-up with friends.

There are no homeless shelters in Emeryville. However, the four emergency shelters in Oakland and Berkeley can house approximately 250 homeless individuals per night and the two battered women shelters can house approximately 45 women and children per night (See Table 13). Again, due to Emeryville's small size, the City need not address this need within the city limits, but rather, the City will consider contributing funds to existing shelters.

FEMALE-HEADED HOUSEHOLDS

The number and percentage of households headed by females has been increasing in Emeryville. In 1970, 20.7 percent of the families with children were headed by a single female. In 1980, the percentage had increased to 53.2 percent of all families with children. In 1980, black female-headed families with children accounted for 75.4 percent of all female-headed families with children. Extrapolating from the 1980 Census, 304 households currently would be comprised of female-headed families.

In 1980, 29.5 percent of all female-headed families with children lived in poverty. Of all families living in poverty with children, 94.7 percent were headed by a single female. This information indicates that the absence of an additional wage-earner and the lower income traditionally earned by female workers creates a significant housing problem for single-parent households.

TABLE 13
SHELTERS/TRANSITIONAL HOUSING
Oakland and Berkeley

Project Name	City	# of Beds/Rooms	Date Opened	Residents	Comments
Emergency Temporary Shelters					
Salvation Army	Oakland	13 rooms	NA	homeless families	Most families from Oakland. Occasionally from Emeryville. Sometimes must turn families away.
Berkeley Emergency Food Project	Berkeley	80-90 beds	1989	homeless	Change church location every 2 months. Turn away 5-15 people per night. Many residents come from Oakland, Richmond, and Santa Cruz.
Berkeley Support Service	Berkeley	90 beds	1970	homeless	30 beds for single males, 30 beds for single females, 30 beds for families. Turn away 4/night; refer to other shelters.
Penniel Services	Oakland	55 beds	1964	single males	Turn away 10-20 on average. Most residents from Oakland. 25 beds are for one-year drug and alcohol treatment program.
Shelters for Battered Women:					
A Safe Place	Oakland	20 beds		women and children	Normally can house 25 women and children. Rent is \$1 per day.
Women's Refuge 24-Hour Shelter	Berkeley	NA	1971	women and children	Can accommodate 19 women and children. Most women from Oakland.

Source: Sedway & Associates, April 1990
[shelters.eca.4.90]

There are no specific housing facilities for female-headed households; however, several programs have been helpful in assisting their long-term and temporary housing needs. The Welfare Department provides short-term financial assistance and relocation assistance to families eligible for AFDC grants. Further, the Salvation Army in Oakland can house 13 families, and A Safe Place and the Women's Refuge can house approximately 45 battered women and children.

Female-headed households, especially those with children, face significant difficulties in finding suitable housing. In addition to high housing costs, landlords often prefer to rent to tenants without children. In general, there is a need for additional financial assistance for working women who do not qualify for AFDC grants. The development of family housing providing units at affordable for-sale prices or rents would serve to alleviate this difficulty and would help single parents provide a stable environment for their children.

DISABLED

According to the 1980 Census, 193 residents over the age of 15, or 5.2 percent of the City's population had a disability which prevented them from using public transportation, of which 60 percent were elderly citizens. The table below illustrates that the majority of the physically disabled population was concentrated in the North End and in the Triangle. Applying these statistics to current population levels, Emeryville has approximately 265 residents with a transportation disability, of which 159 are elderly.

TABLE 14
INCIDENCE OF DISABLED BY NEIGHBORHOOD, 1980

	<u>North of Powell South of Powell</u>	<u>Triangle</u>	<u>Bayfront, Peninsula</u>
Distribution of total disabled population	36.9%	49.4%	13.7%
Disabled population as a percentage of total block group population	12.4%	7.0%	1.5%

Source: 1980 Census of Population and Housing.

While the exact nature of housing needs for the disabled can vary dramatically, in general they have the same or greater need for affordable housing. In addition, wide doorways, special parking areas, ramps and curb cuts are of particular importance for the physically disabled. Other desirable features for the disabled include single-story, ground floor units with security features and proximity to public transportation. According to the East Bay Regional Center and the State Department of Social Services Community Care Licensing Division, there are no housing facilities in Emeryville serving the disabled. Of the larger multi-family complexes in Emeryville, Watergate has the necessary features for residents in wheelchairs, while Emery Bay Club and Apartments does not. The most recent handicap accessibility standards would require a portion of units in a new multifamily project to be accessible. Further, the Public Works Department operates an ongoing program of installing curb cuts. At the present time, over half of the City's curb corners have been made handicap accessible. It is also recommended that the City consider utilizing CDBG funds for installation of ramps at individual units upon request for individuals of low and moderate income.

The lack of affordable housing is one of the greatest obstacles to housing the disabled. Many disabled individuals are unable to work and must rely on the minimum income provided by SSI. For this reason, many individuals capable of taking care of themselves must live with relatives or in a board and care facility. It is generally believed that as many as 25 percent of the disabled individuals living in room and board facilities would function better in a less restrictive environment.

LARGE FAMILIES

The census defines households of five or more persons as large households. Further, households that have more than 1.01 persons per room are considered overcrowded. As previously mentioned, Emeryville's average household size is among one of the smallest in the state. In 1980, only 3.4 percent of the total occupied households, or 73 units, had five or more persons. Based on census information there were 458 housing units with five or more rooms in 1980. This suggests that there are enough large housing units to meet the needs of large households in the City.

What the census figures do not indicate is how many of these large families actually live in large enough units. There are likely many large families who cannot afford to rent or buy as much housing as they need. With the addition of Pacific Park Plaza and Emery Bay Club and Apartments, the average household size has continued to decline in Emeryville.

FARMWORKERS

Agriculture is not a significant part of Emeryville's economic base as virtually no one in the county's work force is a farmworker. Based on statistics from the Employment Development Department, only .3 percent of the total County employment is agricultural. As a result, there is no need to provide housing for farmworkers in Emeryville.

V. PRESERVATION OF HOUSING

PRESERVATION OF RESTRICTED AFFORDABLE HOUSING

The tables below illustrate the City of Emeryville's inventory of restricted affordable housing units:

TABLE 15

NAME	# OF UNITS	EXPIRATION OF RESTRICTIONS	FUNDING SOURCE
Emery Glen 6200 Doyle	36	No expirations	Section 8 Conventional
Scattered Site Moderate Rehabilitation	33	14 units in 1997 9 units in 1998 1 unit in 1999* 1 unit in 2000 8 units in 2001	Section 8 Mod. Rehab.
Scattered Site Redevelopment Agency- Sponsored Rehab	9	1 unit in 1994* 3 units in 1995 2 units in 1996 1 unit in 1998* 2 units in 1999	Low/Mod Income Housing Funds (tax increment)
Emeryville Artists Cooperative 1420 - 45th Street 4250 Horton Street	61	37 units in 2022** 24 units in 1994**	Redevelopment Agency Tax Increment
TOTAL RESTRICTED AFFORDABLE UNITS	139		
TOTAL AT RISK 1990-2000	38		

* These are single family units and therefore are not counted in the final Total At Risk

** These units are all ownership units and therefore are not counted in the final Total At Risk

None of the above units are designated as elderly units or are occupied by ineligible households.

TABLE 16

**Rental housing Units with Income Restrictions
Imposed by Governmental Assistance***

Address	No. of Units	Expiration of Restrictions	Funding Source
1275 64th St.	2	5/12/97	Section 8
5851 Vallejo A,B,C	3	12/12/97	Section 8
1265-69 Ocean	6	11/1/97	Section 8
1089 48th St.	3	5/8/98	Section 8
1285 55th St.	1	10/22/2000	Section 8
5859 Vallejo	2	6/30/98	Section 8
5855 Vallejo	1	12/18/99	Section 8
4343 Essex	7	5/31/98	Section 8
1064 48th St.	1	2/6/94	Redevelopment Agency
4309-11 Salem	2	6/28/95	Redevelopment Agency
1236 53rd St.	2	7/15/95	Redevelopment Agency
4379-81 Adeline	3	7/21/96	Section 8, Redevelopment Agency
5851 Vallejo	2	6/2/99	Redevelopment Agency
5553 Vallejo	1	7/27/98	Redevelopment Agency
3604 Adeline	1	6/18/95	C.O. Block Grant
Emery Glenn 6200 Doyle	36	None	Ala. Co. Hous. Authority Conventional Housing
4475/77 Emery	8	1/31/2001	Section 8

* None of the above units are reserved exclusively for the elderly

The Emery Glen units do not appear to be at risk. The Alameda County Housing Authority owns and manages this project and assures the City that these units will continue to be provided to low and very low income households, with no expiration date.

Of the 38 multifamily units at risk during the 1990 - 2000 planning period, all are scattered site multifamily rental units. The City does not have an ability to continue the property owner's rent limitation beyond the terms of their agreements.

Cost Analysis

1. Preservation of the Units: This could be accomplished through continued subsidies to the tenant households,

One approach is to work with the Alameda County Housing Authority to request that Section 8 vouchers be reserved for the households upon the expiration of their agreements with their landlords. The ability to provide tenants with Section 8 certificates will enable the City to assure that these income eligible households are still provided with affordable housing. While it is not yet clear what position the Federal Government will take on preserving Section 8 Moderate Rehabilitation Program units, the City would like to pursue the above course of action with the Housing Authority for all affected units. This presents a no-cost solution for the City, thereby enabling the continued funding of the Housing Rehabilitation Program which adds approximately six to ten new rental units to the stock each year.

A second subsidy approach would be for the City to subsidize households itself. The following analysis breaks down the cost to the City to subsidize households for a period of fifteen years:

1 bedroom unit fair market rents	\$648.00
- 30% of 70% income	\$618.00
Subsidy per unit	\$ 30.00
\$30.00 X 14 units =	\$420.00
	X 15 years (180 months)
	\$ 75,600.00
2 bedroom unit fair market rent	\$763.00
- 30% of 70% income	\$694.00
Subsidy per unit	\$ 69.00
\$69.00 X 17 units =	\$1,173.00
	X 15 years (180 months)
	\$ 211,140.00

3 bedroom unit fair market rent	\$954.00
- 30% of 70% income	\$771.00
Subsidy per unit	\$183.00
\$183.00 X 9 units =	\$1,647.00
	X 15 years (180 months)
	\$ 296,460.00
2 bedroom unit fair market rent	\$1,068.00
- 30% of 70% income	\$820.00
Subsidy per unit	\$248.00
\$69.00 X 17 units =	\$496.00
	X 15 years (180 months)
	\$ 89,280.00
GRAND TOTAL	\$672,480.00
(1991 dollars)	

This approach would involve the Agency in direct unit management which would also involve administration beyond the capacity of current staffing levels. All totalled, the costs would be very high, the term of restriction would be limited to fifteen years, and there would be no guarantee that decent and safe units would be available to subsidize.

The likely source of funds would be tax increment housing set aside funds. Presently, these funds are designated for debt service on a \$6.1 million bond, plus programs which cannot be funded through the bond such as the Housing Rehabilitation and First Time Homebuyers Program. Bond counsel would need to determine whether bond funds were eligible for the subsidization program described above.

The City's Community Development Block Grant allocation is quite small. The 1991/91 allocation is \$56,000. The City feels the best use of this limited funding source is the housing rehabilitation program, where it is leveraged with redevelopment agency funds.

Non-profit involvement in these units is unlikely as the majority are in two to four unit properties. Six major non-profit groups with successful experience in this field have been contacted. Of the six, only one expressed mild interest. The others indicated they would only be interested in a minimum of 20 units. The largest project in Emeryville contains only seven units. Nonetheless, the City will continue to solicit the involvement of non-profit groups.

2. Replacement of the units: To subsidize the construction of 38 lower income rental units of the above sizes, would cost an average of \$25,000 per unit, or a total of \$950,000. This scenario is based upon a non-profit developer working with the Redevelopment Agency to develop the units. It is likely that a restriction period of between twenty-five and thirty years would be instituted.

The City is working closely with a non-profit developer to construct 275 rental units, of which 40% will be affordable to lower income households. The Agency is contributing up to \$4

million in housing bond funds. These 110 units would more than fill the gap of the 38 lost units.

In conclusion, the most cost effective approach for the City, aside from the rental project described above, would be to have the Housing Authority reserve 38 Section 8 vouchers for the tenant households in question.

Should this option not be available, or be available for only a portion of the units, the City feels that its funds (both CDBG and redevelopment tax increment) are best used continuing to rehabilitate rental properties and attaching fifteen year rent limitation agreements, as well as to provide assistance to developers constructing rental units in the City.

CONSERVATION OF NON-RESTRICTED HOUSING

During the last five years, 2 housing units were demolished in the City of Emeryville. The City is unusual in that the historic allocation of land uses has resulted in two small and very distinct residential clusters in East Emeryville, with the balance of the land occupied primarily by industrial uses. Over the past decade, these industrial land uses have been transitioning to retail, light industrial, office and some residential, while the residential areas have remained virtually unchanged. There has been no infringement activity which has taken residential and developed it into other uses. Rather, non-residential lands have often been taken and put to residential use. Prime examples are the 584 unit Pacific Park Plaza, the 424 unit Emery Bay Club & Apartments, the 121 unit Emery Bay Village and the burgeoning number of live/work spaces developed in converted warehouse and light industrial spaces.

This land use trend has been encouraged by the current and recent past City Councils and Planning Commissions. The conservation of residential units is further enforced by the Code Enforcement Officer who provides information to owners of boarded up and/or code violating property about the Housing Rehabilitation Program. Boarded up units are also identified for the Vacant Housing Program, whereby the Agency will purchase the property at a fair market value and then either rehabilitate the property (if feasible) or construct anew and sell or rent the units at a price affordable to low to moderate income households.

However, a specific program or ordinance is needed to set the criteria for how requests for the demolition of residential units will be handled. The City would set as a goal the conservation of all residential units.

VI. OTHER HOUSING ISSUES

ABAG REGIONAL HOUSING NEEDS DETERMINATIONS

While State law mandates that local communities satisfy their housing demand (the total number of units needed to house the population), they must also seek to meet a share of the housing need of persons of all income levels within the area significantly affected by a jurisdiction's general plan. State legislation enacted in 1980 requires the Association of Bay Area Governments (ABAG) to determine existing and projected Bay Area regional housing needs for persons of all income levels. ABAG also determines each city's share of the regional housing needs. The figures are based on market demand for housing, employment opportunities, land availability, commuting patterns, type and tenure of housing and the provision of a 4.5 percent housing vacancy rate. The most recent determinations were prepared by ABAG in the "Housing Needs Determinations, San Francisco Bay Region", January, 1989.

Governmental Code Section 65584(c) gives all cities and counties 90 days to review and revise the determinations contained in the ABAG report. The City of Emeryville did not request any revisions to the ABAG regional housing needs projected for the City.

Housing element updates, including the development or modification of existing housing programs, are to consider the regional housing shares. As discussed in the subsequent section on program achievements, the City of Emeryville came close to achieving the overall production numbers needed in the 1980's. However, the City fell short of producing a sufficient number of affordable housing units.

For the 1988 to 1995 period, ABAG's housing needs determinations for the City of Emeryville call for the production of 765 units, of which 199 should be affordable to very-low income households, 138 should be affordable to low-income households, 168 units should be affordable to the moderate-income household and 260 should be for the above-moderate income household.

Housing production levels in Emeryville are likely to exceed those required to meet ABAG's regional share. As noted previously, an additional 850 units are in the preliminary planning stages and likely to come on line within the period. Several other projects are also anticipated to come on line during this period. Although these units (excluding the 50 Emery Villa units) are proposed as market rate, the City has expressed a strong desire to attract family households, provide for its lower income households, and accommodate artists in live/work space. Toward that end, the Agency anticipates assisting in the development of at least five new affordable ownership duplexes through the Vacant Housing Program, and may participate in a 270-unit project located adjacent to Emery Bay Club and Apartments, which calls for 40 percent below market units. The City's mixed-use zoning allows for the inclusion of residential units as a component of a commercial project. There are several underutilized properties which may also be redeveloped in this manner over the coming five years.

The City is also embarking upon several new programs which will result in a substantial increase in affordable housing units. These are the First Time Homebuyers Program (providing financial assistance to reduce the cost of housing to income eligible first time homebuyers) and the

Affordable Housing Set Aside Program (requiring developers of residential projects of 30 or more units to provide 20 percent of the units at a rate affordable to low to moderate income households, for a period of 25 years).

In addition, the City has initiated the process of issuing a tax increment bond which would generate between six and seven million dollars to be used exclusively for the creation of low to moderate income housing.

It is anticipated that within a five year period, the City can produce approximately 548 affordable units, exceeding the 505 affordable units required by ABAG. These units, as well as planned market rate units, would break down as follows:

	ABAG Requirement		City Plans
Very Low Income	199	139 =	50 Emery Villa 5 Vacant Housing 54 Emery Bay II 30 Rental Rehabs
Lower Income	138	119 =	15 Vacant Housing 54 Emery Bay II 50 First Time Home
Moderate Income	168	290 =	50 First Time Home 80 Del Monte (20% of Total) 100 Catellus (20% of Total) 60 St. Albans (20% of Total)
SUBTOTAL	505	548	
Above Moderate Income	260	960 =	320 for Del Monte 400 for Catellus 240 for St. Albans
TOTAL	765	1508	

By income category, the number of housing units that can be constructed, rehabilitated and conserved over a five-year period is as follows:

Quantified Objective	New Construction	Rehabilitation	Conervation
Very Low Income	109	30	125
Low Income	69	20	125
Moderate Income	240	0	0
Above Moderate	1122	0	0

In addition, the City has approximately \$1.0 million remaining in its housing increment bond (funds not presently dedicated to a specific site) with which to make up the gap in very low income (60 units) and lower income (19 units). Subsidies of approximately \$20,000 would be available.

The entire City of Emeryville, excluding the Watergate condominium complex, is in a redevelopment area (1976 Redevelopment Area and Shellmound Redevelopment Area). Under California Community Redevelopment Law, the Agency is required to see that 15 percent of all new housing units added to the stock from the inception of the Plan to its termination, be affordable to low- to moderate-income households, with 40 percent of the 15 percent affordable to very low-income households.

The Agency has estimated that with several new large residential projects in the pipeline, the Agency requirement for the next five years will call for 323 low- to moderate-income units, of which 194 are required to be affordable to lower - to moderate-income households and 129 for very-low income households. After calculating the City's accomplishments and projects in progress since the inception of the Redevelopment Area Plans, it has been determined that the Agency will need to assure that 1 low to moderate-income units are built, and that 38 very-low income units are built. These projects are as follows:

<u>Project Name</u>	<u>Lower to Moderate</u>	<u>Very Low</u>
Emery Glen	0	36
Housing Rehab	18	0
Emeryville Artists		
Coop	61	
Senior Housing*	0	50
Vacant Housing*	15	5
Total	94	91
<u>Requirements</u>	194	129
Surplus (Deficit)	(100)	(38)

*Projects underway, completion of all units expected within three to five years.

To further address the challenge of meeting the City's affordable housing goals, several new housing programs are currently being formulated by the Redevelopment Agency. These include a first-time homebuyers program, the issuance of a tax increment bond to finance additional affordable housing, and a program to require developers of private projects to include a percentage of affordable housing units as part of their projects. Projections for all of the programs will enable the Agency to meet its redevelopment law requirements.

HOUSING COSTS AND ABILITY TO PAY

Under current regulations regarding housing elements, the State Department of Housing and Community Development (HCD) defines household "overpayment" as households which contribute in excess of 30 percent of their income to housing. In 1980, 15 percent of Emeryville's households paid more than 35 percent of their incomes for housing; 25 percent of the City's households paid in excess of 25 percent for housing. The majority (86 percent) of households paying more than 25 percent had incomes of less than \$15,000, and almost all (98 percent) households paying more than 35 percent had incomes of less than \$15,000.

Ownership households overpaying for housing represented a small portion (8.3 percent) of all households paying over 25 percent; however, all of these households were located in the Triangle. Twenty-five percent of the renter households paying more than 25 percent of their incomes on housing resided in the North End, 61 percent resided in the Triangle, 25 percent lived in the Peninsula and Bayfront.

While it is difficult to accurately quantify the current extent of overpaying for housing, general indicators in the market suggest the City is becoming increasingly bifurcated, with a more affluent and single or two-person adult population residing in the newer, multi-family housing located west of the railroad tracts. The new residents do not likely suffer the same housing cost burden as older, generally less-affluent residents. The lower-income population in East Emeryville is residing in a traditionally affordable area. However, recent data suggests these neighborhoods are now beginning to experience escalating costs as well.

As indicated in Table 15, the City's very-low income renters can pay up to approximately \$450 per month for rent, assuming a two-person household contributing 30 percent of their income towards rent. (A one-person household would be able to afford less than \$400 per month for rent.) The City's two-person low-income households are estimated to be able to afford between \$450 and \$706 per month. As noted earlier in the discussion on citywide rent levels, page 13, the majority of market rate apartments are well in excess of these figures.

Home resales prices occurring in East Emeryville and Watergate condominiums, the least expensive in the City, while considerably less than the home prices averaged in surrounding cities, are not affordable to the City's very-low income household. The least expensive resales are theoretically affordable to the low-income households, assuming

TABLE 17
AFFORDABILITY ANALYSIS
Based on Median Income in Alameda County
Emeryville, 1990

Income Range(a)	Classification (b)	Household Population Distribution(c)		Max. Affordable Monthly		Housing Price @ 20 Percent Down Payment(e)	
		Number	Percent	Housing or Rent Pymt. (d)			
Less than \$18,000	Very Low Income	708	23.6%	\$450		\$51,278	
\$18,001 - \$28,250	Lower Income	528	17.6%	\$450	\$706	\$51,281	\$80,478
\$28,251 - \$42,350	Moderate Income	753	25.1%	\$706	\$1,059	\$80,481	\$120,645
\$42,351	Above Moderate	<u>1,011</u>	<u>33.7%</u>	\$1,059		\$120,648	
	Total Households	3,000	100.0%				

Notes:

- (a) Income range based on HUD income limits for two person family living in Alameda County.
- (b) Based on HUD median household standards.
Very Low Income = less than 50% of median; Low Income = 50% to 80% of the median;
Moderate Income = 80% to 120% of the median; and Above Moderate Income = above 120% of the median.
- (c) Household population distribution based on income distribution in 1980 Census, applied to current household statistics.
Number of households based on ABAG Projections 1990.
- (d) The maximum monthly housing payment is calculated as 30% of income.
- (e) The maximum house price is based on a 30-year fixed rate mortgage at 10% interest rate with a 20 percent down payment.

Source: Sedway & Associates, April, 1990
[ena,cca]

They have been able to save sufficient equity for a downpayment. It is more likely that the City's most affordable for-sale housing is sold to moderate-income families.

RESIDENTIAL ENERGY CONSERVATION

In addition to the initial costs of housing, a community should also be aware of continuous, life-cycle costs. One of the most prevalent life-cycle costs incurred by residents in Emeryville is the cost of energy required to keep a household and live comfortably. For this reason, it is important that energy conservation measures are identified and incorporated into City housing policies. In order to ensure energy conservation measures statewide, the Energy Commission created conservation standards for single-family and multi-family homes. These standards require newly constructed homes to make use of a series of energy conservation measures to ensure a minimum level of energy efficiency. The Emeryville Building Department enforces these standards on a local level. Developers and builders can use a number of energy/conservation measures to attain the standards, including wall, ceiling, and floor insulation; energy efficient equipment; and double-glazed windows. Additionally, a weatherization program, which is part of the City's rehabilitation program, has been implemented to help reduce energy costs of residents. Finally, the City is planning to provide information on water conservation measures to all property owners and developers initiating new construction or rehabilitation projects.

VII. STATUS AND EVALUATION OF HOUSING PROGRAMS 1985-1990

The 1986 housing element outlined an array of programs or actions to be undertaken to assure the continued development, maintenance and improvement of housing within the City. The programs addressed the issues of housing maintenance, housing costs and affordability, housing production and access to housing for special needs groups. This section briefly describes the success of the stated housing programs in achieving their goals. To the extent that housing programs did not achieve their stated goals, this section describes measures taken in the programs for 1990 to 1995 to enhance their effectiveness. Further, several new programs have been added to better meet the City's housing needs. Appendix B provides a more detailed analysis of each action item contained in the previous element and describes the results in achieving the City's objectives, as well as references new housing programs which have been designed to address ineffectiveness.

PROGRAM ACHIEVEMENTS FOR HOUSING PRODUCTION BY INCOME CATEGORY

Overall Production - (New Housing Production Actions 1-7)

Between 1980 and 1990, the Regional Housing Needs Determinations published by ABAG, indicated that the City of Emeryville required the addition of 1,221 units. In determining the number of units required during the 1985-1990 planning period, the previous housing element subtracted the 638 units added during the first half of the decade, plus 19 substantially rehabilitated units that had previously been uninhabitable, for a total of 657 new units produced. Subtracting this net addition from ABAG's projected need for Emeryville left 564 units to be added over the five-year period, of which 317 were projected to be needed for very-low income, 184 for low-income, 84 for moderate-income, and the balance for above moderate-income households. The production of these units was listed as a program goal in the previous housing element.

Between 1985 and 1990, an estimated 508 units were added, only 56 units short of the ABAG goal. Of the units added during the previous five-year period, 83 percent were included in Emery Bay Club and Apartments, a project that has rents which are considered affordable only to the City's moderate and above-moderate income households.

Production of Affordable Housing - (Affordable Housing Opportunities Actions 1-13)

As evidenced by the above statistics, the City came close to achieving the overall production goals established by ABAG. However, far fewer affordable units were developed than the number indicated in ABAG's Housing Needs Determinations. Only the 10 units in the Emery Apartments are considered affordable. During 1989, this previously abandoned building (formerly the Roxie Hotel) was privately renovated and converted into 10 apartments. Rents in this building are considered affordable to the City's very-low and low-income households.

The limited addition of affordable housing is an onerous problem faced by the majority of the Bay Area's communities where new privately sponsored housing is rarely affordable to lower-

income residents due to high land and construction costs. Housing costs have escalated further as a result of strong employment and household growth fueling housing demand concomitant with a limited supply of vacant land leading to insufficient production levels. In most communities where affordable housing is achieved, the units were developed with one or multiple layers of public subsidy.

Several existing and new programs should assist the City in achieving the affordable housing needs over the subsequent planning period. As mentioned previously, the Agency established a citizen's Housing Committee. The Committee is reviewing several new housing programs to be implemented in the near future. As outlined in the updated program section, these new programs are aiming to create up to several hundred units of affordable housing.

One of the City Council members sits on the Alameda County Housing Council. One of the first goals of the Housing Council is to promote support for a general obligation bond to finance the development of affordable housing. Approval of the bond will result in the allocation of funds to develop at least one 30-unit project in Emeryville. The Housing Council has a long-term goal of assisting in the countywide development of 2,000 units by 1992.

In 1987, the City adopted a new zoning ordinance. The modification of the zoning ordinance was listed as a housing element goal. Significant features of the new zoning ordinance include permitting second units and manufactured housing in single-family neighborhoods (under specific program guidelines), creating a mixed-use zoning category in which medium density housing (30 units per acre) is allowed, permitting higher residential densities than dictated by zoning that are consistent with land use policies, allowing replacement of residential units regardless of lot size under specified conditions and the requirement that residential projects with 15 units or more provide 20 percent of the units to accommodate households of three or more persons, and permitting live/work projects. As a result of these new zoning categories, 25 units were developed and several others are in the planning stages.

The City actively promotes the development of affordable housing through several programs. The New Construction Housing Program uses tax increment funds to encourage the production of new housing units affordable to low and moderate-income households. While no projects were developed in the previous planning program, the City is currently negotiating to acquire a site for the proposed senior project. In addition to donating the land to the project, the City is providing approximately \$400,000 in tax increment funds, reducing the parking ratios as well as providing other incentives.

The City also operates the Vacant Housing Program. The purpose of this program is to underwrite the site acquisition and/or development costs of new infill housing. The newly rehabilitated or constructed homes will be made available to low- and moderate-income households. Once again, no new units were developed in the past five years, however the City has recently acquired its first site and is undergoing negotiations to acquire several others.

One program was eliminated from the affordable housing actions of the housing element. For mixed-use projects with over 200,000 square feet the previous element encouraged developers to provide 20 percent of the units to be affordable to lower-income households. This program would be replaced by the Affordable Housing Set-Aside program which would require

developers of residential projects with 30 or more units to provide 20 percent of their units at affordable rates.

PROGRAM ACHIEVEMENTS FOR THE PRESERVATION OF HOUSING - (Actions 1-3)

A combination of resources are utilized to provide grants and low-interest rehabilitation loans to low-and moderate-income residents. The rehab programs are operated through the Alameda County Office of Housing and Community Development since September 1988. The loan programs include low interest loans for buildings occupied by low- and moderate-income owner occupants or tenants, a paint grant program and a minor home repair grant program. Owners renting their units must maintain the units' affordability over a five- or 15-year period, depending on the funding source utilized. The 1985-1990 goal established in the previous element called for the rehab of 100 units over the five-year period. Rehab production achieved included the following:

<u>Program Name</u>	<u>Units Rehabbed 1984-90</u>
Minor Home Repair	54
Owner Occupant Rehab	10
Rental Rehab	39
Paint Grants	30
TOTAL	133

Based upon these statistics, the City achieved 133 minor and major rehabs, or comparable to the stated goal. This represents approximately 14 percent of the units in East Emeryville. This goal will be maintained in the updated element.

In 1988, the City created a full-time code enforcement position. The role of the new position is to respond to housing condition complaints and, as time permits, to be proactive in attempting to address housing code violations. Low and moderate-income property owners are referred to the rehabilitation loan programs.

Where it does not represent a safety hazard, the City's policy is to discourage the demolition of existing residential properties. All demolition permits are heard before the City Council and over the previous five-year period few were granted.

PROGRAM ACHIEVEMENTS IN REDUCING HOUSING COSTS - (Actions 1-6)

There are several programs outlined in the previous housing element which would result in reducing the cost of housing to the City's lower-income residents. These include utilizing tax increment funds to write-down the cost of land or construction or the waiving of fees. The program suggesting the waiving or reduction of fees has been eliminated in order to preserve the City's General Fund. Other programs, both existing and newly proposed, provide

opportunities for the Emeryville Redevelopment Agency to provide subsidies utilizing increment revenues. In addition, Alameda County Housing Authority issues Section 8 rental certificates and vouchers in Emeryville. As of February 1990, 34 Section 8 Certificates and 11 Section 8 Vouchers provided rental assistance to Emeryville residents. Over 50 percent of the rental subsidies were held by smaller families, occupying studio or one bedroom units. About 30 percent were held by occupants of two-bedroom units with the balance consisting of residents in three bedroom units.

Homeownership assistance is available to Emeryville residents through the County administered Mortgage Credit Certificate (MCC) Program for first-time homebuyers. Through the use of MCC's, eligible homebuyers increase their ability to qualify for a mortgage and reduce their effective mortgage interest rate by approximately two percent. As of June 1990, the program had been operational for nine months, and two MCC's had been issued. The limited number of MCC's was partly attributed to a restriction that MCC's be limited to individuals living or working in the City they were purchasing a home in. In April 1990, the City joined most other cities in the County and lifted this restriction in order to increase the demand for the program. The Redevelopment Agency has adopted a first-time homebuyers program using tax increment monies for downpayment assistance. Specific program features and implementation schedule is anticipated over the next several months.

PROGRAM ACHIEVEMENTS IN PROVIDING FAIR HOUSING - (No action included in previous element - Fair Housing Program incorporated into this element)

In order to assure compliance with fair housing laws, the County contracts with different organizations to offer assistance and to perform occasional audits. This service is currently being offered to Emeryville along with several other communities in northern Alameda County by Operation Sentinel.

During the 1987 to 1990 period, there were 8 fair housing inquiries and complaints made by Emeryville residents. In addition 154 sought assistance in tenant/landlord services. Further, Operation Sentinel continued to conduct audits for the purpose of assessing rental practices in regards to families with children.

VIII. CONSTRAINTS TO DEVELOPMENT

The State's "Summary of the Standards Used in the Review of Local Housing Elements" says "the purpose of a constraints analysis is to identify those governmental and nongovernmental factors unique to the community that inhibit the development, maintenance, or improvement of housing." Following is a discussion of the factors that may impede development in Emeryville.

DEVELOPMENT FEES AND ZONING REGULATIONS

A myriad of different components go into determining the price of housing. Development fees, charged by the City, to review proposed projects represent one cost to the developer/builder. Emeryville's fees are lower than those of other Bay Area communities. Typical single-family fees for City review and utility hookups is estimated to average \$1,317 per unit. Per unit costs for multifamily units (assuming a 400-unit apartment project) are estimated at about \$800 per unit. These fees do not represent a burden on the local development community, as they are significantly below the typical fees charged in surrounding communities, where total per unit processing costs of up to \$10,000 per unit are not uncommon.

In August 1990 the City adopted a Traffic Facilities Impact Fee for all new development, to provide funding for increased demand on City streets. This fee varies for different land uses, but is consistently lower than impact fees in the Bay Area. The implementing ordinance however, specifically exempts from the fee, all residential development which is affordable to low to moderate income households.

In September 1990, the City adopted an Affordable Housing Set Aside Program which requires that all residential developments of thirty units or more set aside twenty percent of their units as affordable to low to moderate income households. This ordinance is not viewed as a constraint since the developer is enabled to provide the units as affordable to moderate income, which should not present an undue financial burden on a developer. In addition, the ordinance provides the opportunity for the Emeryville Redevelopment Agency to provide financial assistance should the project be economically infeasible with the inclusion of the 20% set aside requirement.

Further, the City's zoning regulations do not pose a significant barrier to residential development. The City allows densities of between 45 and 108 units per acre in the RH (high density residential) zoning districts, parking standards for multifamily housing provide for less than two spaces per unit.

Further, while many of the vacant infill sites in the single family areas are substandard in size, the City will consider the granting of a variance for replacement housing.

BUILDING CODES AND ENFORCEMENT

The City uses the 1988 Uniform Building Code, and according to the Chief Building Official, there is nothing in the code or in the City's code enforcement program which is a constraint to development, maintenance, or improvement of housing.

The recently established Code Enforcement Program does not present undue hardship upon property owners. The Code Enforcement Officer responds primarily to complaints, and only as time permits investigates properties that appear to be in violation of code. All residential property owners cited by code enforcement are provided information on the City's Housing Rehabilitation Program as a means for rectifying code violations.

ON AND OFF SITE IMPROVEMENT REQUIREMENTS

The City imposes no specified on and/or off site improvement requirements of new development. Each project is reviewed individually to determine its ability to contribute to any infrastructure needs which may exist.

PERMIT PROCESSING TIMELINE

The City of Emeryville prides itself in providing an expedited planning process. The following represents typical timeframes for completing various discretionary approvals:

- Conditional Use Permit - one to three months
- Minor Subdivision - one to three months
- Environmental Impact Report - six to eighteen months

Naturally, these timeframes do not take into account numerous variables such as the impact of citizens input, incomplete applications, or other political considerations.

LAND AND CONSTRUCTION COSTS

Discussions with local non-profits indicate that financing is available to qualifying households. None of the three banks located in Emeryville (Bank of America, First Interstate and Summit) handle mortgages. Bank of America and First Interstate do originate mortgages in other branches and have done at least a small amount of lending in Emeryville. Discussions with local realtors indicate that most lending comes from throughout the Bay Area, with no emphasis on one specific lender or city. Conversations with sales representatives at Watergate and Pacific Park Plaza indicate that these two condominium projects, comprising nearly 50% of the housing stock in the City, have not had any difficulties in finding lenders for new buyers. The Watergate sales representative stated that 95% of their prospective buyers get approvals. In addition, the County-run Mortgage Credit Certificate program issued four MCCs in Emeryville, with different lenders for each of the four. These lenders were located in San Francisco, Fremont and Oakland.

More prevalent to the housing cost equation are the costs associated with the land, the construction, and the financing. Discussion with new residential developers indicates the typical construction cost of about \$55 to \$60 per square feet, resulting in an average cost of over \$50,000 in hard costs alone for the construction of a prototypical 850 square foot apartment or condominium. Assuming improved land cost of \$50,000 per lot, without any mark-up to reflect market conditions, the unit would sell for over \$100,000. Debt service on this amount alone would require rents of over \$850 per month (excluding all other costs). If a homebuyer were to put down 10 percent, a mortgage of \$90,000 would be required. Debt service on this amount (assuming a 30 year mortgage at 10 percent interest) would be \$790 per month. Comparing these figures to Emeryville's current income profile, the average household in the area would not be able to afford a new apartment or condominium. Thus, the only hope to encourage greater affordability is to offer financial incentives to reduce the cost of construction as the City currently is doing with its various housing programs.

SMALL LOT SIZES

In 1987, the City revised the existing zoning ordinance to allow for second units in the single-family areas of East Emeryville. However, a significant number of the existing lots are too small or narrow to accommodate the parking needed for a two-unit project. These existing conditions render it more difficult for the City to increase its housing stock through the second unit provision.

IX. HOUSING OBJECTIVES, POLICIES AND PROGRAMS

The majority of the housing objectives and policies included in the previous element were judged to be appropriate given the current housing needs. Table 16 outlines the specific implementation programs designed to address the housing objectives and policies. These programs have been modified or eliminated based upon their success during the previous five-year period. In addition, several new programs are recommended to be completed during the planning period.

Following is a summary of the City's ten housing objectives and 42 related policies. The housing objectives include: promoting affordable housing; preservation and upgrading of the City's housing stock; reducing housing costs; increasing housing opportunities for all economic groups; promoting housing variety, encouraging live/work opportunities, encouraging family housing, energy conservation, and equal housing opportunity.

AFFORDABLE HOUSING

Objective

- A. Promote affordable housing opportunities for all segments of Emeryville (including senior citizens, larger families, lower- and moderate-income residents, physically disabled residents, and female-headed families with children).

Policies

1. The City shall encourage the provision of second units on lots containing a single-family dwelling in low-density residential areas to serve the needs of lower- and moderate-income households.
2. The City shall help its special needs population seek funding to maintain their homes.
3. The City may offer incentives to developers constructing housing meeting elderly and lower- and moderate-income family needs. These actions may be taken in conjunction with the Affordable Housing Set Aside program. These incentives may include density bonuses, reduced parking requirements, and/or expedited permit processing for affordable housing units.
4. The existing stock of SRO (single room occupancy) housing should be retained. If units are demolished or converted, the City may require the units to be replaced with comparable units elsewhere.

5. The City shall use its financial powers and resources to reduce the cost of housing and increase the supply of lower- and moderate-income housing through such devices as tax-exempt bonds and tax increment financing. Where direct financial assistance is made to an owner of rental housing, the City shall continue to ensure through Rent Limitation Agreements that the owner charges fair rents.
6. The City shall utilize 20 percent of the Redevelopment Agency's tax increment monies for low- and moderate-income housing programs.
7. While local efforts to provide affordable housing shall be a priority, the City shall still make maximum use of available Federal and State housing subsidy programs for elderly, lower-income, and disabled households.
8. The City shall encourage nonprofit and limited equity ownership of housing. The City shall consider the feasibility of using its financial resources to assist these efforts.
9. The City shall encourage the production/conversion of housing accessible to physically disabled residents and assist such residents in locating "accessible" housing units. The City shall consider density bonuses for each new handicapped-accessible housing unit. "Accessible" means that the housing presents no physical barriers to handicapped people.
10. The City shall continue to enforce the State requirements for handicapped adaptability in new projects. "Adaptable" means housing whose entry and circulation are designed and constructed so that the unit can be made fully accessible by making relatively minor adjustments and additions rather than structural changes.
11. The City shall determine the most appropriate approach for contributing to existing homeless programs in the immediate area.
12. The City shall encourage non-traditional group housing where it is feasible, as a means of reducing housing costs or increasing housing opportunities.

HOUSING MAINTENANCE AND PRESERVATION

Objectives

- B. Preserve the City's sound housing stock.
- C. Allocate City resources to rehabilitate and upgrade existing residential units.

Policies

1. The City shall use local, state, and federal resources when available to assist lower- and moderate-income homeowners and landlords renting to lower- and moderate-income tenants in maintaining their units in sound condition. The City will target its application of the resources to areas where it would make a visible, long-term improvement.

2. The City shall establish a dual program of incentives and code enforcement to maintain private property. As much as possible, housing rehabilitation should be voluntary. Intensive marketing efforts should be directed first to the target areas where an observable impact can be made. As part of this program, the City shall periodically survey housing conditions to identify substandard housing.
3. The City shall continue to offer its rental rehabilitation loan program which enables applicants to obtain below-market interest rate loans to improve rental property and normally requires rents to be controlled for 15 years.
4. The City shall discourage the demolition or conversion of housing in sound condition. If demolition is necessary, the City shall investigate means to secure replacement housing for displaced persons and families of lower- or moderate-income, preferably in the immediate vicinity. The project proponent could be required to construct the housing, or could contribute fees into a fund for the purpose of constructing housing.
5. The City shall aggressively advertise the availability of various housing programs and monies to assist in the rehabilitation and upgrading of the housing stock.
6. The City shall include seismic retrofitting in its housing rehabilitation program.
7. The City's Housing Rehabilitation Program shall allow the construction of additional units as an eligible use of Redevelopment Agency funds.
8. The City shall either preserve or replace affordable housing units for tenants whose restricted units have converted to market rate due to the expiration of restrictive covenants.
9. The City shall encourage the improvement of existing residential buildings.

REDUCE HOUSING COSTS

Objectives

- D. Develop and implement programs to reduce the cost of new housing.

Policies

1. Wherever feasible, the City shall encourage higher residential densities to reduce developers' costs, which in turn should lower housing costs to the renter or purchaser. The City may offer developers bonuses if units for lower- and moderate-income households are provided.
2. The City will continue to require all developers of residential projects with 30 or more units to provide 20 percent of the units as affordable to low- and moderate-income households, for a period of 25 years. This program will include both non-financial and financial incentives as a measure to assure the highest feasible level of affordability.
3. Manufactured housing shall be permitted in the city to the extent required by State law.
4. The City shall explore the feasibility of issuing tax-exempt mortgage revenue bonds to offer low-interest loans to lower- and moderate-income households or to reduce the costs of to developers of constructing such housing.
5. The City shall encourage new rental housing construction. The City shall safeguard tenants of rental housing which is assisted with City financial support from excessive rent increases by executing Rental Limitation Agreements.

HOUSING OPPORTUNITIES

Objectives

- E. Promote new housing opportunities for all economic groups of both the city and a fair share of the region.
- F. Promote development of a variety of housing types in the city, including housing types which will attract family households, and innovative and unusual housing types which promote a sense of community and place.
- G. Encourage opportunities for people to live and work and work in the same space.
- H. Encourage the development of family housing, particularly in the Triangle and eastern sections of both North and South of Powell districts.

Policies

1. The City shall encourage development of housing on underutilized and vacant public land. Presently, there are no such opportunities, but if land becomes available and if it is not needed for other public purposes, it may be rezoned to accommodate housing development.
2. The City shall encourage residential development in mixed-use areas, particularly on large industrial sites.
3. The City shall facilitate the conversion of underutilized or vacant industrial areas when appropriate for residential or live/work use. Several sites have been identified (see discussion on potential land suitable for residential development). The City shall take a pro-active position in assuring that the necessary discretionary actions are taken to accommodate residential development on these sites, whether as exclusively residential projects or as mixed use projects. Further, the City shall maximize conditional use permit densities when appropriate to the surrounding neighborhood.
4. The City shall encourage infill housing.
5. The City shall encourage a variety of housing types, including live/work developments.
6. The City shall prohibit discrimination against households with children (Senior housing projects may be exclusively for senior citizens) and encourage the construction of projects suitable for households with children.
7. The City shall encourage housing opportunities for all economic groups throughout the City, including the elderly and single-parent families. The City shall explore strategies to retain some low- and moderate-income housing whenever actions are proposed that may displace these units.

ENERGY CONSERVATION

Objective

- I. Maintain development and construction standards that encourage energy conservation in residential uses.

Policies

1. The City shall continue to enforce California Administrative Code Title 24 energy conservation standards.
2. The City shall encourage utilization of passive solar energy systems and other energy savings and water conservation measures. The City shall also provide information on water conservation techniques to all residential development and rehabilitation projects.

3. The City shall encourage increasing the energy efficiency of existing residential structures through public education and financial assistance.

EQUAL HOUSING OPPORTUNITIES

Objective

- J. Prevent discrimination in housing opportunity based on having children, race, religion, sexual orientation or source of income.

Policy

1. The City shall assure that services are provided to adequately address cases of housing discrimination and landlord/tenant conflicts by maintaining a contract with a skilled and experienced housing counseling service provider.

TABLE 18

HOUSING PROGRAMS, 1990-1995

I. Objective: Affordable Housing Opportunities for Low-Income and Special Needs Population

Action	Agency	Goal and Time Frame
1 In screening applicants for rehabilitation loans, give priority to loans which will benefit lower- and moderate-income households. Funding sources for the rehab program include a portion of the Agency's tax increment funds, CDBG, Federal rental rehab program resources and other sources that may become available.	Redevelopment Agency	Ongoing 100 over 5 year planning period
2 Amend zoning regulations to offer a density bonus and/or parking waiver for production/conversion of units for elderly or disabled lower-income households or units accommodating 3 or more persons, to be handled on a project-by-project basis in accordance with the developer's needs, the impact on the surrounding neighborhood and commensurate with the benefit to be accrued by the special needs population being served.	City	1992
3 Record restrictions on all new affordable units located on individual parcels (i.e., not second units or apartment buildings) which have been constructed with City financial assistance to limit prices upon resale.	City; Redevelopment Agency	Ongoing 10-20 by 1995

4	Continue to publicize Section 8 Existing Program which provides rent subsidies to lower-income families.	City; Alameda Housing Authority	Ongoing
5	City will utilize state and federal assistance as it becomes available or assist local nonprofits in same, and address the needs of the City's low-income or special needs groups. These resources will be combined to achieve the housing production and rehab goals outlined in Actions 1 and 2.		Ongoing. Current applications for Section 202 Prop. 77 and Prop. 84
6	Issue bonds for development of rental or for-sale housing for very low and lower-income households.		Bond issued October 1990 netting \$6.1 million. Assist 200 units.
7	Provide financial support to regional agency or program that provides housing to the homeless.	City Redevelopment Agency	Determination regarding funding by close of 1991.
8	Develop City-assisted child care center to provide low-cost child care support to female-headed and low-income households.	Redevelopment Agency	Development of enlarged child-care center and extended day care program by March 1, 1991. Completion of 50-unit senior project by 1992.
9	Write down the land cost where feasible and provide additional financial support for the development of low-income housing for the elderly and disabled.	Redevelopment Agency	Completion of 50-unit senior project by 1992.
10	Allow and encourage non-traditional group housing.	Planning Dept.	Ongoing.

- | | | | |
|---|--|----------------|--|
| 1 | Continue to allow homeless or transitional shelters anywhere in the City with a use permit. | Planning Dept. | Ongoing. |
| 2 | For multifamily projects with 30 or more units, consider requiring 20 percent of the units for households with three or more members. For projects with 30 or more units in the Triangle or in the North or South of Powell districts consider requiring a minimum of 40 percent of the units for households of three or more members. | City | Decide on zoning amendment by close of 1992. |

II. Objective: Housing Maintenance and Preservation

- | | Action | Agency | Goal and Time Frame |
|----|---|--|---------------------|
| 1. | Target Community Development Block Grant (CDBG) monies for rehabilitation and neighborhood revitalization. Anticipate funding of approximately \$50,000 annually. | City; Redevelopment Agency; County Housing & Community Development | |
| 2. | Housing code enforcement program to assist property owners in upgrading their structures, relying on voluntary compliance. | City | Ongoing |

3.	When appropriate projects arise, apply to the State Housing & Community Development for Loan Programs (Props. 77 and 84) targeted to housing lower- and moderate-income homeowners and renters.	City; non-profit corporations; County; HCD	Utilize all CDBG monies toward financing the 100 rehab loans planned for a 5 year planning period.
4.	Establish a seismic retrofit component of the Housing Rehabilitation program.	City; Redevelopment Agency; County HCD	Program began in 1990; 20 units per year.
5.	Grant variances where feasible, on substandard lots in single-family neighborhoods.	Planning	Ongoing
6.	Amend regulations to require City Council approval of all residential demolitions to discourage reducing the overall housing stock. Establish criteria for handling demolition requests.	City	Establish criteria by end of 1992.
7.	Obtain Section 8 vouchers for households whose Housing Rehabilitation Program rental restrictions have expired.	Agency	Secure reservations by end of 1992.

III. OBJECTIVE: REDUCING HOUSING COSTS

ACTION	AGENCY	GOAL AND TIME FRAME
1. CONTINUE TO PERMIT MANUFACTURED HOUSING AND MOBILE HOMES IN RESIDENTIAL DISTRICTS.	CITY	ONGOING
2. INVESTIGATE FEASIBILITY OF ISSUING TAX-EXEMPT MORTGAGE REVENUE BONDS TO HELP REHABILITATE, PURCHASE, OR REDUCE COSTS FOR PROJECTS PROVIDING LOWER-INCOME HOUSING.	CITY; REDEVELOPMENT AGENCY	CONSIDER AS AN OPTION.
3. Continue to permit higher residential densities consistent with the land use policies contained in this Plan.	City	Ongoing
4. Utilize state and federal programs which assist in offsetting housing costs to low/moderate-income households.	City; Alameda County HCD	8 MCC's. The County is considering a 2nd round once 1st are issued.
5. Continue a First Time Homebuyers program to provide financial assistance to first-time homebuyers.	Redevelopment Agency	Program start up in 1990. Anticipate 100 loans over five years.

6.	Continue an Affordable Housing Set Aside Program to require developers of residential projects over 30 units to provide 20 percent of the units at rates affordable to low and moderate income households, for a period of 25 years.	Redevelopment Agency	Program start up in 1990. Anticipate 160 units over five years.
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IV. Objective: Housing Opportunities/New Housing Production

	Action	Agency	Goal and Time Frame
1.	Utilize Redevelopment tax increment monies to acquire vacant and underutilized parcels for new housing.	Redevelopment Agency	10-20 units over 5 years. Ongoing.
2.	Encourage development of housing in mixed-use districts.	City	Ongoing; on a project by project basis.
3.	Continue to permit live/work developments.	City	Ongoing
4.	Utilize City funds to assist non-profit and limited-equity cooperatives in the acquisition of housing sites or in rehabilitation of existing buildings.	City; Redevelopment Agency	Ongoing
5.	Rezone Catellus Project site from Light Industrial to Mixed Use.	Planning Commission; City	Action taken by late 1992.

- | | | | |
|----|---|------------------------------|----------------------------|
| 6. | Modify regulations, if necessary, on 2.5 acre site adjacent to Holiday Inn to allow High Density Residential. | Planning Commission;
City | Action taken in late 1993 |
| 7. | Rezone Emery Bay Club & Apts. II site from Medium Density Residential to High Density Residential. | Planning Commission;
City | Action taken by late 1991. |

V. Objective: Energy Conservation

- | | Action | Agency | Goal and Time Frame |
|----|---|--------|---------------------|
| 1. | Continue to administer State Title 24 Energy Conservation Building Standards for Residential Structures. | City | Ongoing |
| 2. | Continue to advertise rehabilitation loan program, which makes low-interest loans available for weather-stripping, among other improvements | City | Ongoing |

VI. Objective: Equal Housing Opportunity

Action	Agency	Goal and Time Frame
1. Continue to enforce anti-discrimination laws by contracting with a skilled and experienced housing counseling service provider. Seek assistance of County in monitoring compliance.	City; County; Operation Sentinel	Current contract ends 1992; renew this one or enter into one with another provider.

APPENDIX A

Glossary of Terms

"Accessible Housing": Units that are accessible and adaptable to the needs of the physically disabled.

"Affordable Housing": The generally accepted measure of affordable housing means spending no more than 25-33% of one's gross income on housing costs. For example, a beginning school teacher earning \$20,000 per year can afford to pay up to \$550 per month for housing. A beginning policeman or fire fighter earning \$26,000 per year can afford up to \$715 per month.

"Affordable Units": All dwelling units made available at prices or rents below market-rate. Affordable units include units affordable to households with very low-income, low-income, and moderate-income.

"Employed Resident": A worker who lives in a given location but could work anywhere.

"Employee": Someone who works at a given location. Workers with routes (travelling salespersons, etc.) are considered employees at the place where they are dispatched from.

"Family": A group of people related by blood or marriage. Not to be confused with "household".

"Household": One or more persons who share a dwelling unit. Not to be confused with "family".

"Housing Need": A local share of the regional housing units assumed by the Association of Bay Area Governments (ABAG) to be "needed." Housing need is distinguished from housing demand, which is sensitive to the marketplace. Housing projections represent probable (rather than desired) levels of housing activity in each jurisdiction of the Bay Area.

"Housing Unit": The official nomenclature of the U.S. Census. A housing unit must have a separate entrance from other housing units but need not have separate kitchen facilities.

"Infrastructure": The grid of public capital improvements (roads, water and sewer) that is necessary to make urban development (including housing) occur. Essential infrastructure is that infrastructure which must be in place for the house to be habitable.

"Live-Work Space": Typically known as renovated industrial space converted to lofts for combined residential/work activities.

"Low-Income Households": Households earning 50-80% of the area median household income, adjusted for household size.

"Market-Rate Units": Market-rate units are those dwelling units available at prices or rents at or above market-rate, which are those prices or rents determined by the marketplace. When market prices or rents are bid up, many households are unable to compete for housing in the marketplace.

"Median Household Income": The middle point at which half of the City's households earn more and half earn less.

"Moderate Income Households": Households earning 80-120% of the area median household income, adjusted for household size.

"Persons per Household (PPH)" The statistical average number of persons in a household.

"Second Unit": A separate dwelling unit that is either attached to another dwelling unit or completely detached from another dwelling unit.

"Very Low Income Households": Households earning less than 50% of the area median household income, adjusted for household size.

"Unit": A basic way of counting homes. The number of units is the number of homes.

APPENDIX
Emeryville General Plan

The following materials constitute an appendix to the Emeryville General Plan as revised and adopted in 1992. The materials represent major portions of the general plan which was adopted by the City in 1987. The Housing element portion, however, has been deleted in its entirety since a revised housing element, in a separate document, was adopted by the City in 1990. The appendix differs from the 1987 plan in that all policies are deleted as well as direct references to those policies. In addition, certain topical material with no current relevance has been deleted. What remains has value in providing background and more detailed information upon which the 1992 policies have been based.

The 1987 plan was designed to function as its own Environmental Impact Report as allowed under California statutes. The material which served this function is retained in the appendix and provides the environmental documentation for the 1992 plan.

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CHAPTER I: INTRODUCTION

A. PURPOSE OF A GENERAL PLAN

A general plan is a long-range statement of public policy primarily for the use of private and public land within a community's boundaries. As indicated by its name, a general plan is not a detailed, parcel-specific policy statement. Instead, it establishes a generalized pattern of future land use and transportation and provides guidance on how to achieve the desired development pattern.

The general plan reflects the aspirations and values of Emeryville residents and is adopted by their elected representatives. It is a mechanism by which a community may articulate its values, determine their relative importance, and assess their comparative long-term implications. There are no "correct," "right," or "ideal" general plans, but only plans which more or less reflect a particular set of values.

State planning law provides a detailed procedure for the adoption of general plans, the intent of which is to allow individuals opportunities to be heard in an attempt to persuade others to accept or acknowledge their values. In exchange for these opportunities, all participants share in the responsibility to accept and support the policies which are incorporated in the adopted plan. Once adopted, these policies become the basis for day-to-day decisions by elected and appointed officials. By this means, the values reflected in the general plan policies shape and form the community and quality of life sought by its residents.

As a consequence, a general plan will not always reflect the existing land use pattern. Its function should not be confused with that of an existing land use map, which is a parcel-specific documentation of land uses as they exist. In contrast, a general plan may ignore individual, small-scale differences in land use and present a generalized picture which represents the dominant land use character of an area. In other instances, the plan may show the transition of an existing land use to a new, different land use. Finally, the general plan attempts to show land use over a relatively long time period.

B. CONTENTS OF THE PLAN

Although general plans are often thought of as primarily concerned with land use decisions, land use is intimately related to other subjects which must also be considered in the planning process and the general plan. State planning law (Government Code Sections 65302-65303) requires policies dealing with land use, circulation, housing, open space, conservation, safety, and noise. In addition, general plans may contain other optional elements if the community so chooses. Plans must cover all territory within the boundaries of the adopting city or county. For Emeryville, the planning area includes all incorporated territory, both public and private, within the city limits shown in Figure I-1. Because planning issues may extend beyond political boundaries, State Planning Law allows a local government to indicate its concern for the future of the lands under its neighbor's jurisdiction. Thus, in some instances, particularly as they relate to transportation, Emeryville's General Plan makes proposals for development/improvements in Oakland and Berkeley.



Figure I-1
GENERAL PLAN AREA

EMERYVILLE GENERAL PLAN

SEDWAY COOKE ASSOCIATES

Urban and Environmental Planners and Designers



C. USE OF THE PLAN

Key Terms

The General Plan consists of text and maps. Certain key terms are used repeatedly throughout the text, and their understanding is required in order to use the Plan. These key terms are described below.

A **goal** is a broad, generalized expression of commonly held community values. Since a goal is broadly stated, disagreement regarding it tends to be uncommon. **Objectives** are similar to goals, and frequently the two terms are used interchangeably. As used in the General Plan, an objective is a more narrowly drawn and concrete expression of community intent. One goal may imply two or more objectives, each responsive to a particular aspect of the more broadly stated goal. For example, a community goal might be "protection of natural resources." A related objective could be "encourage more efficient use of energy." Other objectives related to this goal might address air quality, water quality, wildlife habitat, etc.

A **policy** is a fairly precise statement of how public regulatory powers and fiscal resources will be exercised and allocated over time to achieve a specific objective. Policies may be expressed in text as guidelines or standards, maps, diagrams, or some combination thereof. It is important to note that some policies are more specific than others. Examples of policies relating to the previous examples of a goal and an objective include "land use patterns which can be easily served by public transit should be encouraged" and "the energy efficiency of existing residential structures should be increased through public education and financial assistance to low- and moderate-income families."

The policies contained in the Plan are expressed in terms of "shall" or "should." There is an important distinction between these two terms. As used in the Plan, "shall" indicates an unequivocal commitment, while "should" indicates a slightly less rigorous commitment to be followed in the absence of compelling, countervailing factors specified in the General Plan.

The final link in the chain running from an objective to its physical realization is provided by **implementation**. Implementation programs and measures are concerned with the specific actions necessary to execute or carry out policy. Examples of implementation programs include revision of sign ordinances, development of a capital improvements program, or allocation of budget to rehabilitate housing.

Time Frame and Plan Revisions

Traditionally, general plans projected an ultimate land use pattern and established a date for its achievement. These "end-state" general plans presented many problems, the most significant of which were unresponsiveness to changing conditions and the difficulty of implementing an end-state land use pattern which provided little or no guidance concerning the day-to-day phasing of development.

End-state plans have largely been replaced by plans using time frames of 10, 15, or 20 years. The Emeryville General Plan reflects a 20-year time horizon. To provide for flexibility and responsiveness to change, the Plan also requires a comprehensive review and revision, if appropriate, at 5-year intervals; except the housing element which by law must be revised not less than every five years. This periodic update will allow the Plan to always maintain at least a long-range 15- to 20-year perspective.

The periodic review of the Plan does not require a total overhaul. Once adopted, the Emeryville General Plan establishes a basic policy framework which must be followed over time. The purpose of reviewing the Plan every five years is to allow it to adjust in response to: changing conditions, both internal and external to the City; the availability of more recent planning data; and shifts in community values. Only under the most extraordinary circumstances, such as a major local disaster, a national emergency, or the complete failure over a long span of time to periodically review the Plan, would a thorough and total overhaul be necessary.

If appropriate, the City may amend all or part of its adopted general plan. Mandatory elements may be amended up to four times in any calendar year, unless special conditions apply as defined by Government Code Sections 65358(c) and (d).

Plan Maps and Their Interpretation

Before a General Plan official map shall be given direct regulatory effect, it must be translated into a more precise map, usually a zoning ordinance map, with legally definable boundaries. The principal rule to be followed is one of common sense. Taking a comprehensive view of all relevant Plan policies, the result must further the intent of these policies in a practical, workable, and sound manner.

At times, it may be necessary to review data maps which were used to prepare official maps in order to determine how a Plan map expresses the relevant policies. Usually, the data maps are at the same scale as the Plan maps, and they can provide useful insights into the policy rationale for the boundary lines delineated on the Plan map. Inspection of the Plan map should clarify whether Plan designations appear to follow physical boundaries, either natural or man-made, and non-physical, man-made

boundaries, e.g., section lines, city limits. No attempt should be made to measure distances of areas on the Plan map.

Once a definable and legally describable boundary has been preliminarily established, it should be compared with any other non-physical boundaries in the vicinity, such as property ownership lines, political entity boundaries, section lines, etc. Applying the common sense rule, impractical or unusual preliminary boundaries should be revised, provided this is consistent with Plan policies.

Use of the Plan by Officials and Citizens

The General Plan is designed to be used by elected and appointed City officials on a daily basis in making decisions with direct or indirect land use implications. It is also to be used by officials and staff of other government agencies—federal, state, and local—and to provide a framework for interjurisdictional coordination of planning efforts. The Plan is designed for frequent consultation, and failure to use the Plan will quickly cause it to become out-of-date and irrelevant.

City residents and property owners are expected to be major users of the Plan. Members of these groups may choose to use the Plan as it regards a particular geographic area or as it addresses a particular subject of interest to them. In either instance, the Plan must be used comprehensively, and Plan objectives and policies must be viewed in the context provided by all other relevant objectives and policies. To assist the reader in taking this comprehensive approach, the Plan elements are cross-referenced to each other, and each element group contains an introduction explaining the relationship of its elements to those of the other groups.

D. THE PLAN AND THE REGULATORY SYSTEM

California law provides local governments with a variety of regulatory mechanisms and administrative procedures for implementing general plans. These implementation tools must be based on policies contained in the plan. Provisions of state planning law requiring consistency between the general plan and its implementation programs are briefly described below.

Zoning Regulations

The General Plan should not be confused with the zoning ordinance map. A zoning ordinance map is a parcel-specific statement of how lands may be used in the present and near future. As a legal instrument, the zoning map has immediate force and effect. In contrast, a general plan contains a generalized statement of land use. It does not have direct and immediate effect on land use. The function of a general plan is to provide a policy framework that must be reflected in the zoning ordinance and specific plans, which are key mechanisms for implementing these policies. Because the Plan map is general, it will not show the location of small-scale land uses, such as neighborhood commercial centers. The Plan contains policies governing the location of such small-scale uses, and it will be necessary to exercise judgment in interpreting these policies. Since it is a long-term statement of land use policy, it is possible that the ultimate use of a particular land area, as shown in the Plan, may

differ from the existing use currently permitted by the zoning ordinance map. As prescribed by phasing mechanisms contained in the Plan, the zoning ordinance must be revised at the appropriate times to reflect the long-range land use policies in the Plan.

Section 65860 of the California Government Code¹ requires that the City's zoning ordinance be consistent with its General Plan. Consistency may be achieved only if the City has adopted a general plan and the various land uses authorized by the zoning ordinance are compatible with the objectives, policies, general land uses, and programs specified in such a plan. This section also requires that when the general plan is amended, the zoning ordinance must likewise be amended as is necessary to maintain consistency with the plan.

Section 65566 requires that any zoning action by the City which affects the use of open space land or any interest in such land must be consistent with the City's open space plan. Closely related is Section 65567, which requires that the City's open space zoning ordinance, the adoption of which is mandated by Section 65910, also be consistent with the open space plan.

Section 65853 requires that the Planning Commission provide the City Council with a written recommendation on a proposed zoning ordinance and all amendments of an existing ordinance. As required by Section 65855, this recommendation must include discussion of the relationship of the proposed ordinance or amendment to the general plan.

Subdivision Regulations

Section 66473.5 provides that the City shall not approve a proposed subdivision map unless the subdivision, including its design and proposed improvements, is consistent with the General Plan. In a manner similar to zoning regulations, consistency may be found only when the City has adopted a plan and the proposed subdivision is compatible with the objectives, policies, general land uses, and programs specified in the plan. This requirement applies to subdivisions for which parcel, as well as tentative and final maps, are required. Section 66474 states that the City shall deny approval of tentative and final maps if it finds that the proposed map, or the design or improvement of the proposed subdivision shown on the map, is not consistent with the general plan.

Although somewhat confusing as stated in the law, the two above sections also apply to condominiums, community apartment projects, or stock cooperatives which must submit tentative and final maps (see Section 66426). Unless the general plan contains definitions, objectives, and policies specifically directed at the conversion of existing buildings into condominium projects or stock cooperatives, these two sections, 66473.5 and 66474, do not apply to such conversions (see Section 66427.2).

Section 65567 requires that a subdivision map may not be approved unless it is consistent with the open space plan. The City may require the dedication of land, the payment of in-lieu fees, or some combination of the two, for park or recreational purposes as a condition of the approval of a final or parcel map, but only if the

¹ Unless otherwise indicated, all references are to the Government Code.

general plan contains a recreational element and the dedicated facilities conform to definite principles and standards contained in the element (see Section 66477(d)).

Finally, the City may require the reservation of land within a subdivision for parks, recreational facilities, fire stations, libraries, or other public uses, provided such requirements are based on appropriate general plan elements (see Section 66479).

Capital Improvements

Section 65401 authorizes the City Council to require City officials and agencies to prepare and submit lists of all public works projects recommended by them for study or construction during each ensuing year. This requirement also applies to special and school districts whose jurisdictions lie wholly or partially within the City. Upon submittal, such lists must be integrated by the City into a coordinated program which must be submitted to the Planning Commission for review as to its conformity with the General Plan.

Section 65402 requires the Planning Commission to review the conformity of the following actions with applicable elements of the General Plan:

- acquisition of lands for public purposes
- disposition of lands
- street vacations
- authorization or construction of public buildings or structures.

Environmental Impact Procedures

An environmental impact report (EIR) must be prepared for the General Plan in order to determine if the Plan policies and recommendations could result in significant effects to the environment. Because the contents and discussion in a general plan largely overlap the contents and discussion in an EIR, State law permits communities to combine them as a single document. For projects proposed within the Plan's jurisdiction, Section 15080 of the California Environmental Quality Act (CEQA) Guidelines requires that an initial study of the project consider whether the project is compatible with the General Plan. Section 15125(b) of the Guidelines requires an EIR to discuss any inconsistencies between a proposed project and the General Plan. Appendix G(a) of the Guidelines states that a project will normally be found to have a significant effect on the environment if it will conflict "with adopted environmental plans and goals of the community where it is located."

Building and Housing Codes

Section 65567 provides that building permits must be consistent with the open space plan. The State Housing Law (Health and Safety Code Sections 17910, et seq.) requires the City to adopt regulations imposing substantially the same standards as those contained in various uniform industry codes. This law also imposes special standards, which may be more burdensome than the uniform industry codes, designed to protect against certain types of hazards (fire, noise, earthquakes, unstable soils) and to achieve certain resource goals (energy conservation). Emeryville may adopt regulations and standards at variance from those mandated by the State Housing Law if justified by local conditions. Although not explicitly required by the State Housing

Law, the General Plan is an especially appropriate vehicle for documenting such local conditions and specifying the necessary regulatory response in order to justify variances from State law.

Redevelopment Plans

Redevelopment plans provide local communities with a powerful tool to stimulate public and private improvements in deteriorating areas. The plan must discuss streets, buildings, and open space; contain a description of financing methods; and provide for participation by affected property owners. The Health and Safety Code (HSC) Sections 33302 and 33331 require the Planning Commission to review the redevelopment plan before action by the City Council and prior to adoption, the City must have adopted a General Plan and found that the redevelopment plan is in conformance with the General Plan.

Other Consistency Requirements

Listed below in capsule form are other consistency requirements contained in State law which at some future date may apply to Emeryville:

- HSC Section 34326 concerns consistency between housing projects undertaken by housing authorities and the general plan;
- HSC Section 34711 concerns consistency between housing programs for developmentally disabled, mentally disordered, and physically disabled and the housing element of the general plan; and
- Streets and Highway Code Section 32503 concerns consistency between the planning and locating of parking facilities undertaken by parking authorities and the general plan.

CHAPTER II: FRAMEWORK FOR PLANNING

A. BALANCING REGIONAL OPPORTUNITIES AND LOCAL NEEDS

Emeryville is located in the heart of the San Francisco Bay Region, as shown in Figure II-1. Interstate 80 runs north-south through the City, connecting it with the northern portion of the East Bay and San Francisco. State Route 17 and Interstate 580 link the City with the southern portion of the East Bay, Santa Clara County, and the Livermore Valley. Emeryville is integrally related to the region's economy, visual image, and open space system. With Oakland, Berkeley, and Albany, the City shares a magnificent and environmentally sensitive shoreline. Within this context, Emeryville has the opportunity to play a major role in the shape of the Bay Region.

At the same time, Emeryville now has the intimacy of a small town. Its present size and population are typical of what might be characterized as a neighborhood in larger cities. The General Plan can be used to help existing residents and employees, those who have already invested time and energy in the City's improvement, continue to have a place where they can live, work, and enjoy recreation activities.

The City's General Plan is a program for balancing these opportunities. If land use issues are carefully examined in terms of the City's overall economic, cultural, and social fabric, the result can be a conscious blend of regional and local interests.

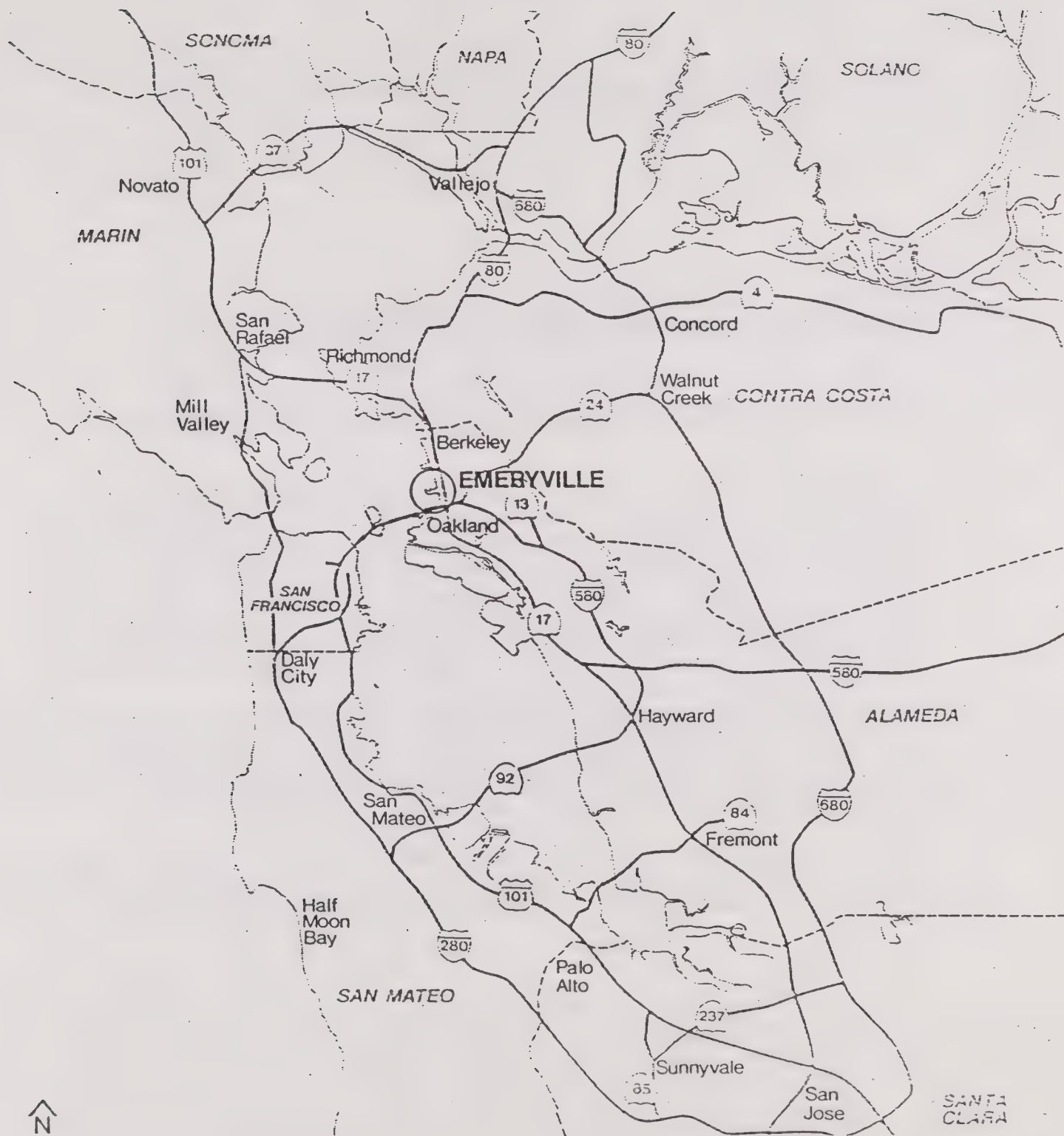


Figure II-1
REGIONAL LOCATION

EMERYVILLE GENERAL PLAN

SEDWAY COOKE ASSOCIATES

Urban and Environmental Planners and Designers

C. PLAN FORMAT

State planning law gives communities discretion on how their general plans can be organized. It also provides that the degree of specificity and level of detail in the plan reflect local conditions. Three interlocking components have been defined to establish Emeryville's framework for planning. They are shown in Figure II-2 and are as follows:

Community Development. This component encompasses those aspects of Emeryville that define its built environment; e.g., its housing stock, businesses, roads, public facilities, etc.

Environmental Resources. This component encompasses those aspects of Emeryville that comprise its natural environment; e.g., its waterfront, open space and other natural resources, climate, etc.

Public Health and Safety. This component encompasses those aspects of Emeryville that affect the general health, safety, and welfare of the public and of property.

The order in which these components are presented in the Plan does not reflect their priority, but rather a logical sequence of information presentation and policy formulation. The presentation of state mandated issues may be covered by several elements in the Emeryville General Plan. For example, the State requirements for an open space element are spread over six different elements in the Plan.

For each of the elements identified in Figure II-2, the text follows a similar organization. The first part describes the existing conditions related to the element. This description summarizes major opportunities and constraints to the City's orderly physical development. With this first section as a background, the second section offers recommendations in the form of objectives and policies. The recommendations seek to remove the constraints and take advantage of the opportunities that will enable Emeryville to achieve the goals set forth in Chapter II. Finally, each element contains an implementation section that describes specific regulatory, advisory, or financial means of carrying out the objectives and policies. Each implementation proposal begins with a specific action item and identifies which agency or group should have primary responsibility. The text following the action item is explanatory and is offered to provide citizens and public officials with a better understanding of how the action item works or how it could be implemented.

D. PLAN CONCEPTS

The key concepts that will serve to organize the City and establish a framework for redevelopment and new development are shown in Figures II-3 through II-6. These concepts must be viewed in combination because the City is a dynamic organism. Its parts must work together in order for it to thrive. A proposal for a street must make sense for the entire City, not just a portion of it. A proposal for a land use must make sense in terms of the site, as well as for the roads that serve it and for the

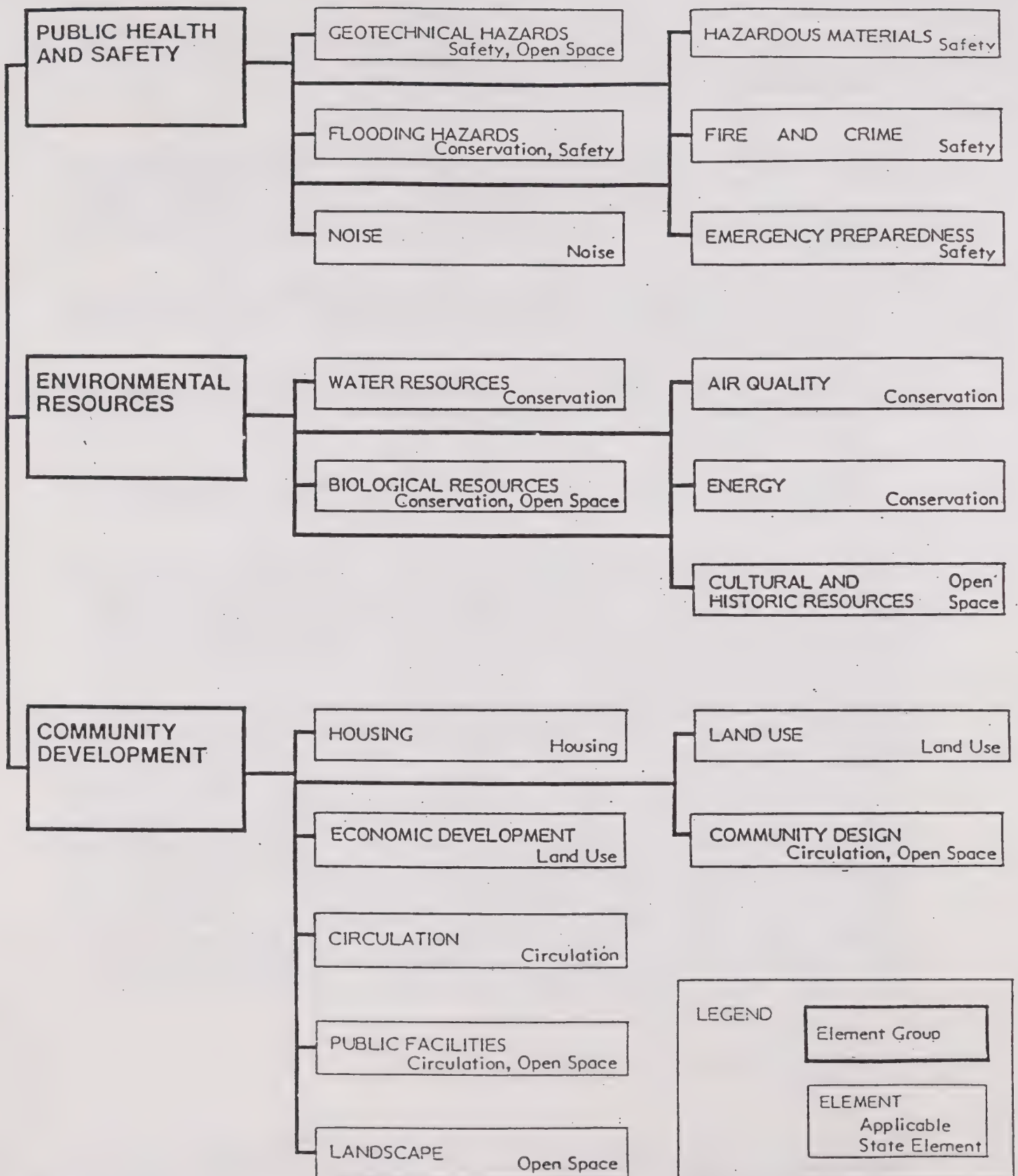


Figure II-2
EMERYVILLE GENERAL PLAN ELEMENTS

EMERYVILLE GENERAL PLAN

surrounding uses. A proposal for a pedestrian corridor must be conscious of the open space systems, the vehicular traffic and pattern, and the location of desirable destinations. While there is a tendency to look at each of these proposals independently, the Plan seeks to have readers look at them interdependently.

Land Use

In general, a city's land use pattern determines where people live, conduct business, play, and interact. The location and mixture of these various activities in Emeryville can contribute to a cohesive, dynamic community, or can result in isolated enclaves thwarting efforts to develop civic pride. In residential areas, the land use pattern should provide convenient shopping and social opportunities, discourage heavy vehicular traffic, and create an environment where residents feel safe and comfortable. In business areas, the land use pattern should offer convenient eating, shopping, parking, and support services, and permit higher development intensities along transit corridors and where regional accessibility is good. In some locations, a key to encouraging vitality and livability is to permit the mixing of residential, business, and recreational activities. Residents of these "mixed use" areas begin to see their environs as a place of day-long activities rather than a "9-5" work location or a place to sleep.

Compatibility of Uses. "Transitional" or "buffer" uses need to be introduced in areas where adjacent uses are presently incompatible. For example, the location of a residence next to an intensive industrial facility is undesirable because the operation of the industrial facility diminishes significantly the quality life for the resident. The idea is to introduce a use that is more compatible with each and can help separate the two incompatible uses. Light industrial, commercial, and artist live/work space are examples of uses that offer such an opportunity.

In addition, selecting appropriate development intensities can serve to attract greater public/private interaction where desired, protect single family areas and small-scale businesses, stimulate investment in underutilized areas, and minimize conflict in areas of incompatible activities. The idea of tailoring particular strategies to areas within the City is presented in the next section.

Development Strategies. Although Emeryville is a small community, it is complex because of its diversity. Within the broader subareas — Peninsula, Bayfront, and East Emeryville — there are a number of smaller "districts and neighborhoods" that can be identified on the basis of related land uses, physical boundaries such as streets or railroad tracks, or community facilities. In some cases, the identity/cohesiveness of the district or neighborhood is weak, as in the entire Bayfront. In other cases, the identity/cohesiveness is quite strong, as in the residential portions of the Triangle. Because each district and neighborhood has different characteristics and needs, appropriate development strategies must be fashioned for each. The strategy generally targets the desired type of development, the relationship of the new development to the existing structures, and the intensity of that development.

Circulation

The circulation system deals with how efficiently, safely, and conveniently people move about the City. It includes the street system, sidewalks, bicycle paths, and other travel routes. Aside from determining how well and conveniently people and goods can move about, the circulation system serves to reinforce the land use pattern. In an area of more intensive, large-scale development like the Bayfront, roads must be adequately sized and sufficient access points must be provided to ensure efficient circulation. In residential areas like the Triangle, the

road system should be of a different character. High-speed, high-volume travel should be discouraged in these areas. It should be clear that such a system is necessary before the land use potential can be realized. Unless improvements to Emeryville's own internal circulation system and to the regional network are made, Emeryville cannot intensify its development pattern without experiencing a serious increase in traffic congestion. Hence, the land use and circulation are mutually dependent on one another.

Internal Circulation. A major constraint to adequately serving travel needs in Emeryville is the current reliance on two streets to handle the bulk of the City's internal traffic. Powell and Hollis Streets are the only main thoroughfares that traverse the length of the City. Consequently, when people need to travel across the City, they funnel onto these roads. Peak hour commute periods are especially frustrating and thus a fundamental concept of the General Plan is to increase the number of travel routes available to people going cross-town.

Emeryville, because of its size and central location in the region, has opportunities to provide alternatives to automobile travel which should be recognized and encouraged. However, the mere provision of bicycle paths or pedestrian ways does not ensure their use. The routes must be coordinated with the citywide open space system so that travel along them is enjoyable. Moreover, they must connect places where people want to go: from home to school, school to parks, home to work, etc. A bicycle path that dead-ends without some type of recreation or activity will simply not be used. Thus, a basic concept underlying the designation of non-vehicular travel routes is the interconnection of focal points of activity.

Regional Access. Emeryville is particularly well-situated within the Bay Region, being convenient to downtown San Francisco and the rapidly growing East Bay. The land use concept seeks to take advantage of this location by encouraging offices, hotels, and regional retail activities along the freeway. To realize this potential, the circulation concept promotes coordination with neighboring communities and the State Department of Transportation to improve Emeryville's freeway interchanges at: Powell Street, Ashby Avenue, and San Pablo Avenue/McArthur Boulevard. Significantly, Emeryville has a tremendous opportunity to foster use of the AC Transit and BART systems. It is highly recommended that the land use pattern and circulation system be developed to encourage and support transit service.

Open Space and Recreation

A present lack of open space and recreational facilities and opportunities was one of the issues most frequently mentioned by Emeryville residents. It is clear that the vitality of residential neighborhoods, and a measure of their "quality of life," is interrelated with the availability of these resources. Consequently, the open space concept is aimed at improving the visual image of areas, defining pedestrian corridors, providing recreational opportunities, and connecting the separate areas of the City in a meaningful way.

The fundamental premise in designing these systems is that they must connect various activity areas: residences, schools, shopping areas, and recreational opportuni-

ties. Major areas of open space must be accessible to those who would benefit from them. The open space, pedestrian, and bicycle systems are sensitive to the location, type, and intensity of proposed land uses. The systems only make sense if there are sufficient numbers of potential users; otherwise, pedestrian and bicycle systems would be underutilized. Similarly, if the proposed routes traverse uninteresting areas or exhibit hazardous conditions, the systems would again be underutilized.

Urban Design

In addition to organizing the City's development pattern and providing access to homes, businesses, and recreation areas, the Emeryville General Plan strives to enhance the image and quality of Emeryville. This aim is to be accomplished partially by cosmetic means, such as landscape, signage, guidelines for building design, and quality street furniture.

Improvements in the quality of life are achieved also by allowing a mix of uses. The mixed use concept encourages two or three different activities to locate in close proximity, sometimes in the same building. The interrelationships among the uses attract and help sustain vitality. People are in a mixed use area for 24 hours rather than from "9-5" as in a strictly office environment.

CHAPTER III: COMMUNITY DEVELOPMENT

A. INTRODUCTION

The Community Development component of the Emeryville General Plan contains provisions that relate to the physical development of the City. More than any other component, this one will establish the image of the City. It serves as the primary vehicle for ensuring the logical organization of residential, commercial, industrial, and public facilities and for encouraging the timely provision of public facilities to meet the needs of the community.

The Community Development component directly responds to the following sections of the State Government Code:

- Section 65302(a) requires preparation of a land use element which designates the proposed general distribution and general location of the uses of land for housing, business, industry, open space, education, public buildings and grounds, and other categories of public and private uses of land.
- Section 65302(b) requires preparation of a circulation element to establish a transportation system that facilitates the efficient transport of goods and the safe movement of all segments of the population.
- Section 65302(c) requires the preparation of a housing element to assure the adequate provision of housing for all segments of the community.
- Section 65303 permits a community to prepare additional elements where in the judgment of the City, additional elements are important. This component contains the following optional elements: economic development, public facilities, community design, and landscape.

C. ECONOMIC DEVELOPMENT

Introduction

The City's employment base can best be described as transitional. The historical industries that have accounted for the majority of the City's jobs are relocating; the new industries that have located in the City are smaller-scale in operation and much more labor-intensive. Emeryville's Bayfront, with its development potential and locational advantage relative to other East Bay communities, is in a position to see a dramatic transformation of its economic base. At the same time, East Emeryville represents an opportunity to maintain and encourage expansion of small manufacturing operations.

TABLE III-II: EMPLOYMENT BY INDUSTRY, 1984

	<u>Peninsula</u>		<u>Bayfront</u>		<u>East Emeryville</u>		<u>City Total</u>	<u>%</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>		
Construction	157	7.1	65	3.3	141-143	1.6	363-365	2.8
Manufacturing	613	27.7	780	40.0	4,347- 4,351	49.6	5,740- 5,744	44.4
Wholesale	73	3.3	209	10.7	1,154	13.2	1,436	11.1
Trucking/warehouse	0	—	274	14.1	193	2.2	467	3.6
Finance, insurance and real estate	376	17.0	125	6.6	59	0.7	558	4.3
Retail	320	14.4	117	6.0	542-548	6.2	979-985	7.6
Service	386	17.4	170	8.7	1,224- 1,228	14.0	1,750 1,754	13.5
Mixed uses:								
Manufacturing/service	0	—	0	—	52-57	0.6	52-57	0.4
Manufacturing/retail	0	—	0	—	15	0.2	15	0.1
Manufacturing/wholesale	0	—	136	7.0	513	5.8	649	5.0
Wholesale/retail	0	—	28	1.4	99	1.1	127	1.0
Wholesale/service	0	—	40	2.1	2	—	42	0.3
Retail/service	0	—	0	—	194-195	2.2	194-195	1.5
Wholesale/retail/ manufacturing	0	—	0	—	100	1.1	100	0.8
Public	175	7.9	0	—	0	—	175	1.4
Unknown	<u>115</u>	<u>5.2</u>	<u>6</u>	<u>0.3</u>	<u>137</u>	<u>1.6</u>	<u>258</u>	<u>2.0</u>
Total	2,215	100.0%	1,950	100.0%	8,772- 8,817	100.0%	12,905- 12,937	100.0%

Source: Contacts Influential, October 1984; SCA.

Jobs in Emeryville

Overall, approximately 12,900 people are employed in Emeryville, or an estimated 2.4% of the County's 1985 employment projection of 535,900. Although its portion of the regional share is small, the City is a major "jobs exporter." Relative to its labor

force of 2,157 workers in 1980, the City has a major surplus of jobs, with about six jobs for every employed resident, compared to one job for every employed resident in the County. The City's traditional image as an industrial city is supported by its employment base. Approximately 45% of the City's employees work in manufacturing, primarily in machinery, foods, furniture, printing, or film. By contrast, less than 15% of the County's employment is in manufacturing. As shown in Table III-11, other industries, such as wholesale and service, also account for substantial employment in Emeryville but are relatively minor compared to the numbers employed in manufacturing.

Over two-thirds of the City's jobs are located east of the railroad tracks in East Emeryville. Most of the City's largest employers, such as Cetus, Grove Valve & Regulator, and Wonder Bread, are located in this area. Nearly one-half (49.6%) of East Emeryville's 8,800 employees work in the manufacturing industry. More significantly, this accounts for over three-quarters of the City's manufacturing employment, suggesting that this type of employment is highly concentrated in this area. Table III-11, shows that, in fact, East Emeryville represents the primary job location for a number of different industries, including wholesale (80%), retail (55%), and service (70%).

The Bayfront represents the City subarea with the greatest potential for change. Two-thirds of the area's 1,950 employees work in large-scale manufacturing, wholesale, and trucking activities, such as Judson Steel, Pfizer Company, and Garrett Freightlines. Because of its location between the railroad and the freeway, the Bayfront is ideal for trucking and warehousing. This is reflected in the employment figures which show nearly 60% of the City's employment in this industry is located in the Bayfront. Nevertheless, these uses are slowly being replaced by office, retail, and hotel uses, as the land values have increased to the point where large-scale, land-intensive businesses can no longer compete with more people-intensive activities.

While the employment patterns in the Bayfront and East Emeryville are representative of the traditional, industrial image of the City, the employment pattern on the Peninsula is an illustration of more recent development trends in the City and in the East Bay. Although occupying only a small portion of the City's land area, the Peninsula accounts for approximately 20% of the businesses (132) and employment (2,215) in Emeryville. The numbers in Table III-11 reveal that manufacturing still dominates the employment character of the area; however, the jobs are more likely to be of an office nature rather than machine-intensive. Virtually all of the "manufacturing jobs" in this area are with Cutter Laboratories, a high-technology bio-engineering firm located in one of the area's office towers. With the number of high-rise towers in the area, it is not surprising that about 67% of the City's finance, insurance, and real estate jobs also are found on the Peninsula.

As the economic and employment base of Emeryville shifts from its historic industrial origins, the City will begin to accommodate more labor-intensive and service-oriented businesses at higher employment densities (higher numbers of employees per square foot). This shift will have major implications for the City's land use pattern and transportation system. Future employment trends projected by ABAG are shown in Table III-12. ABAG's figures show that manufacturing and wholesale will continue to account for the bulk of the employment base for the next 20 years. In fact, these sectors are expected to grow by about 10%. However, their importance relative to other sectors will diminish. Both retail and services are expected to grow by about 15% between 1985 and 2005. Given the projected change in the land use pattern,

particularly in the Bayfront, the proportion of job growth in the retail and service sectors is expected to be even greater than projected by ABAG. Similarly, the intensity of development and extent of reinvestment may not have been anticipated by ABAG, so that the total number of jobs would also be underestimated in the ABAG forecasts. How much more job growth Emeryville would experience over the next 20 years is largely dependent on the market and Bay Area economy. Since ABAG revises projections every two years, the City will have the opportunity to modify ABAG's forecasts in light of the City's comprehensive planning efforts.

Emeryville's Labor Force

Given the projected changes in the types of jobs likely to be provided in the City, it is worthwhile examining the job skills of Emeryville's resident workers. Such comparisons can highlight shortages in certain business sectors, or opportunities to target business development in particular sectors. When local jobs do not match resident labor skills, residents must look elsewhere for employment or possibly move.

The U.S. Census distinguishes between those who are in the labor force and those who are not. Those in the latter category include anyone who for a variety of reasons are not holding or seeking a job of any kind. Unemployed persons who are actively seeking employment are considered to be part of the labor force. About four out of every five persons over 16 years old in Emeryville are in the labor force; roughly 20% are not because they are elderly, institutionalized, discouraged, chronically unemployed, in school, etc. Of the 2,326 persons in the labor force in 1980, 7.2% were unemployed. This figure is skewed by the high employment rate (employed persons as a percent of those in the labor force) in the Bayfront and Peninsula, where it was 97.4%. In the North End, the unemployment rate was 11.3% and in the Triangle, it was 13.7%.

Table III-13 illustrates the types of jobs held by the 2,157 employed residents. As noted earlier, there are approximately six jobs for each resident worker in the City. This "job availability" varies considerably by industry. For every Emeryville resident employed in the manufacturing industry, there are about 19 manufacturing jobs in Emeryville, and for every resident employed in the wholesale industry, there are about 11 wholesale jobs. For the other industries, the number ranges from a low of two, for the finance, insurance, and real estate industry, to three, for the trucking/warehouse businesses. With the addition of the Pacific Park Plaza, Emery Glen, and Emery Bay Village residential developments since 1980, the number of residential workers in the City has increased. As of 1980, there was one resident worker per household. Assuming a similar ratio for the new households yields a 1985 estimate of resident workers of about 2,560. The 1980 estimate of 17% of the City's labor force being employed in Emeryville is expected to be lower since a large proportion of Pacific Park Plaza residents, which account for most of the 1980-1985 increase, are assumed to work elsewhere.

No conclusions can be drawn regarding whether the job skills required to perform the job "match" the skills held by Emeryville residents. For example, a firm classified as a manufacturing business may be a regional headquarters for that business, and employ only executive, administrative, and managerial personnel. A citywide survey will be needed for an assessment of job skills needed to work in Emeryville. The types of jobs held by Emeryville's labor force in 1980 is indicated in Table III-14. Tailoring an economic development effort to match those skills could help reduce unemployment and the need to commute to other communities to work.

TABLE III-12: EMPLOYMENT PROJECTIONS, 1985-2000

	<u>1985</u>	<u>%</u>	<u>1990</u>	<u>%</u>	<u>2000</u>	<u>%</u>	<u>2005</u>	<u>%</u>
Agriculture/Mining	80	0.6	60	0.4	40	0.2	30	0.2
Mfg/Wholesale	6,190	45.9	5,910	41.2	6,780	42.1	6,940	42.6
Retail	1,930	14.3	1,930	13.7	2,210	13.7	2,170	13.3
Services	2,330	17.3	2,390	17.0	2,720	16.9	2,830	17.4
Other	<u>3,030</u>	<u>22.4</u>	<u>3,840</u>	<u>27.2</u>	<u>4,330</u>	<u>26.9</u>	<u>4,330</u>	<u>26.6</u>
Total	13,500	100.0	14,100	100.0	16,100	100.0	16,300	100.0
County	549,700		612,400		724,200		778,900	
% of County		2.5%		2.3%		2.2%		2.1%

Source: ABAG, Projections - 85, July 1985.

* * * * *

TABLE III-13: EMPLOYED PERSONS 16 YEARS OR OLDER, BY INDUSTRY, 1980

<u>Industry</u>	<u>North End</u>	<u>Triangle</u>	<u>Bayfront, Peninsula</u>	<u>City Total</u>	<u>% of Total</u>
Agriculture	5	0	22	27	1.3
Construction	0	39	43	82	3.8
Manufacturing	82	162	58	302	14.0
Transportation	41	53	76	170	7.9
Communications	0	7	25	32	1.5
Wholesale	11	26	98	135	6.3
Retail	11	94	154	259	12.0
Finance/ins/real estate	23	13	206	242	11.2
Services	95	180	498	773	35.8
Public administration	<u>0</u>	<u>61</u>	<u>74</u>	<u>135</u>	<u>6.3</u>
Total	268	635	1,254	2,157	100.0%
% of Emeryville Residents Working in Emeryville	12%	20%	17%	17%	

Source: 1980 Census of Population and Housing, Summary Tape File 3A.

Not unexpectedly, a large proportion of the labor force living in the North End and in the Triangle were employed in what traditionally are considered "blue collar" jobs. In the Bayfront and Peninsula, a majority were employed in traditional "white collar" jobs. A very coarse indication of how well these skills are accommodated by Emeryville's economic base can be seen in the percentage of Emeryville job holders working in Emeryville. Table III-13 shows that in 1980 about 17% of Emeryville's labor force held a job in the City; the rest commuted to their jobs. The anticipated shift in the City's employment base towards retail and service would seem to correspond with the type of job skills currently held by a majority of the City's labor force. Nevertheless, the closing or relocation of some of the City's large manufacturing and trucking operations could affect a considerable number of residents.

Relationship between Emeryville's Land Use and Economic Conditions. A major goal of the City is to foster economic growth which will maintain the City's vitality, allow for funding of necessary infrastructure improvements like roads and sewers, and upgrade the City's image. Because the City is in such a favorable position in terms of its regional location and proximity to the Bay, there is enough interest in private redevelopment that Emeryville will almost certainly attain these goals in the long term. However, some negative side effects will result in the transition process.

The most significant side effects of reinvestment and new development activities, particularly in the Bayfront, will be the displacement of businesses that might prefer to stay in Emeryville if possible. While some of the bigger and older heavy manufacturing operations are no longer appropriate for as urban a location as Emeryville, some of the businesses that would be displaced would be compatible with the City's changing image.

Another possible problem would be development that is heavily slanted towards offices. If the vast majority of new development is devoted to this use, it could actually cause an economic decline because much of it could remain vacant for long periods of time. Also, from the City's standpoint, it should not become dependent on a single industry or group of industries that respond to the same business cycles; otherwise an economic downturn could create significant declines in tax revenues as well as create unemployment and potential massive economic dislocation.

TABLE III-14: JOB TYPES HELD BY EMERYVILLE RESIDENTS

Job Type	Labor Force			City Total	% of Total
	North End	Triangle	Bayfront & Peninsula		
Managerial/prof specialty	23	92	697	812	37.6
Technical/sales/admin support	95	164	440	699	32.4
Service	44	154	54	252	11.7
Farming/forestry/fishing	—	7	7	14	0.6
Precision prod/craft/repair	17	45	32	94	4.4
Operators/fabricators/labor	89	173	24	286	13.2
	268	635	1,254	2,157	100.0%

Source: 1980 Census of Population and Housing, Summary Tape File 3A.

TABLE III-15: FUNDING PROGRAMS FOR BUSINESS RELOCATION

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Application to Emeryville</u>
1. LOAN GUARANTEES PROGRAMS					
a. 503 program	Small Business Administration	Guarantee a 40% second mortgage loan on new construction up to \$300,000.	Depends on circumstances.	Funds are available through a certified development corporation.	Could help underwrite costs of developing space for businesses displaced by redevelopment.
b. 7A program	Small Business Administration	Guarantees up to \$500,000 in loans, pays for working capital and equipment.	Individual business must meet certain size and profitability criteria.	Limited funds available depending on outcome of federal budget process.	Could help businesses capitalize expansion in conjunction with moving.
c. 502 program	Small Business Administration	Loan guarantees for fixed assets. Loans at market rate but over a longer term than banks usually give; covers fixed assets.	Business must have 30% equity in the project being financed and must have cash flow sufficient to meet debt service.	Same as above.	Same as above.
2. LOAN PROGRAMS					
a. 503 program	Small Business Administration	Provides up to 40% of cost for fixed asset expansion at below market rate interest at 7 years rather than 3 year terms.	Company must invest 10% equity and get 50% financing from conventional lender. Business must have a net worth of less than \$6 million and profits of \$2 million or less.	Funds available mostly for healthy expanding businesses rather than more marginal operations.	Same as above.

FUNDING PROGRAMS FOR BUSINESS RELOCATION

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>
3. SUBSIDIES					
a. Redevelopment agency relocation reimbursement as required by state law.	City redevelopment agency.	Pays for relocation of businesses displaced by condemnation in a redevelopment project area.	---	<p>Redevelopment agency must pay for the following expenses:</p> <ul style="list-style-type: none"> -- cartage charges for business, personal property, inventory, and fixtures; -- disconnection and reconnection of fixtures and equipment; -- search expenses connected with finding a new site; -- reprinting of materials made obsolete by move; -- notification of business customers; -- telephone installation charges; -- business license fees; and -- other expenses which are determined reasonable by agency. 	Could help businesses relocate from Bayfront to other parts of the City.

D. CIRCULATION

Introduction

The Circulation Element is an important component of the General Plan, and serves as a basic, general guide for the development and coordination of more detailed plans and programs to build and improve streets, intersections, freeway interchanges, transit services, and bicycle, pedestrian, and parking facilities. The discussion in this section complies with Section 65302(b) of the State Government Code.

Two fundamental objectives have been used to formulate the circulation proposals. First, the transportation system must provide for reasonable service to regional travel that goes to, from, and through the City, and provide for efficient, safe, convenient, and attractive circulation within the City. Second, the circulation system is designed to support the pattern of land uses called for in the General Plan. It does this by providing the access capacities needed to serve the development densities and types of uses allowed by the Plan in the various parts of the City, and by directing the major traffic flows into routes that serve the more intense land uses directly, and keeping that traffic away from residential neighborhoods.

Regional Access

Much of Emeryville's land area currently is occupied by low-density industries. With more effective utilization of the City's land areas through both new development and redevelopment at comparatively moderate densities, traffic volumes into and out of Emeryville would significantly increase compared to the traffic volumes generated by the City's existing land uses. Nevertheless, Emeryville's central location at the junction of the major East Bay freeway routes and its location near the east end of the Bay Bridge (see Figure II-1) make the City potentially one of the most accessible locations in the San Francisco Bay Area. The City's General Plan proposes attainment of the potential for freeway access by improving the limited interchange ramps and the inadequate street system.

Trips generated by residential development in Emeryville would tend to be shorter than those generated in residential areas further from the center of the East Bay because of the closer proximity to employment center and entertainment activities. Trips generated by new employment in Emeryville would tend to be shorter than trips generated by new employment in San Francisco. In addition, Emeryville's location offers an excellent opportunity to serve a substantial portion of its external trips in HOVs and public transit, particularly by AC Transit. Therefore, development growth in Emeryville, if adequately served by proposed circulation improvements, could have less traffic impact and require less extensive highway improvements than similar new development in other locations.

Powell Street Interchange. The existing Powell Street interchange on I-80 is a diamond type with two signalized intersections at the ramp terminals on Powell Street—one intersection on the east side of the freeway overpass, and one on the west side. The frontage road along the west side of I-80 joins Powell Street in a third intersection immediately next to the ramp terminal intersection, and it also is controlled by signals. Because the three intersections are close together, the signals allow only short green intervals for travel through the intersections, so the traffic capacity is less than it would be if the frontage road intersection were moved farther west.

Ashby Avenue Interchange. The Ashby Avenue interchange on I-80 includes connections to Bay Street for northbound traffic leaving and entering the freeway, but there are no connections to or from Bay Street for southbound traffic. Caltrans proposes to rebuild the interchange in a later stage of the I-80 improvement project, and its reconstruction is a necessary part of building a proposed separate HOV road along the east side of I-80, which is the key element in the entire I-80 project. The Environmental Impact Statement for the project² prepared by Caltrans, explains that traffic northbound on I-80 in the p.m. peak will be slowed intentionally by a four-lane "bottleneck" at Ashby Avenue, and the HOV road will bypass the congestion point on a separate roadway. This treatment will hold the northbound evening peak period traffic congestion on the south side of Ashby, which will leave a free-flowing condition on the freeway north of Ashby for Berkeley traffic, but will tend to block the freeway in Emeryville and prevent Emeryville traffic from entering the freeway northbound.

Such a plan would be severely detrimental to Emeryville unless Emeryville is provided a better connection between Bay Street and the Ashby Avenue interchange. The interchange is located on the boundary line between Emeryville and Berkeley, and the adoption of a particular interchange design will require agreement of all three parties: Caltrans, Emeryville, and Berkeley.

San Pablo Interchange. There are ramps to and from the east on I-580 that connect by way of 35th and 36th Streets to San Pablo Avenue in Oakland near the Emeryville boundary line. In addition, there are ramps to and from I-580 west toward the Bay Bridge that connect to San Pablo Avenue in Emeryville by way of MacArthur Boulevard. These two sets of ramps form a full interchange with I-580 at San Pablo Avenue and provide a third freeway access point for Emeryville traffic. The interchange is only partially effective now largely because of capacity limitations in the San Pablo-MacArthur intersection.

In order to reach a decision on how to improve traffic flow and safety in this area, it will be necessary to coordinate planning with Oakland, and that planning activity is a logical next step.

¹The Caltrans I-80 improvement project initially proposed to convert the existing interchange into a "buttonhook" type, removing the southbound on- and off-ramps from their existing position at Powell Street and connecting them instead to the frontage road. The ramps on the east side of the freeway would remain where they are. The Caltrans plan also would remove the existing ramp for traffic turning right from Powell Street to go south on I-80. Caltrans' reason for these modifications is to make more room on the freeway in order to install an exclusive HOV lane along the right-hand edge of the freeway starting about 600 feet south of Powell Street and going to the Bay Bridge.

²U.S. Department of Transportation, Federal Highway Administration, and State of California Department of Transportation, Final Environmental Impact Statement, Operational Improvements to Routes I-80 and I180 in Alameda and Contra Costa Counties, February 1984. The interchange plan proposed by Caltrans removes the existing directional ramps and replaces them with "buttonhook" ramp connections to the frontage road on the west side of I-80, and a one-loop partial cloverleaf arrangement on the east side. The interchange plan includes a two-lane link between Bay Street and Ashby Avenue that would not have sufficient capacity for the Emeryville traffic that will be generated in the Bayfront.

Figure III-5

EXISTING CIRCULATION SYSTEM, 1984

- CONGESTED INTERSECTION
- FREEWAY
- ▬ PRIMARY ARTERIAL
- ▬ SECONDARY ARTERIAL
- ▬ COLLECTOR
- ++++ RAILROAD
- - - AC TRANSIT ROUTE
- ⊙ TRANSBAY SERVICE
- ⊞ LOCAL SERVICE
- ▼ AC TRANSIT DEPOT
- - - PROPOSED HOV LANE
- ba → TO BART STATION



EMERYVILLE GENERAL PLAN

SEDWAY COOKE ASSOCIATES

Urban and Environmental Planners and Designers

scale in feet 0 100 200 300 400 500 600 700 800 900 1000

1000

FIGURE III-6
EXISTING TRAFFIC
CONDITIONS

5
ESTIMATED
AVERAGE DAILY TRAFFIC (000s)

(A) INTERSECTION LEVELS OF SERVICE
(p.m. peak)



0 200 400 800

EMERYVILLE
GENERAL PLAN
SEDWAY COOKE ASSOCIATES

Local Access

The local circulation system is characterized by a limited number of through streets and by many short street sections and cul-de-sacs. Only four-lane Powell Street in the east-west direction and two-lane Hollis Street in the north-south direction offer direct routes across the City. Other principal traffic-carrying streets such as San Pablo Avenue and Ashby Avenue are also in Oakland and Berkeley. The existing street system needs improvement, and Emeryville's small size makes it possible for the City to provide reasonable and effective alternatives to automobile travel for short, local trips within the City, including major bicycle and pedestrian corridors. The existing bus service is provided by AC Transit. There will be opportunities for improvements to transit service in connection with the street plans and Caltrans projects.

Traffic volumes on the major streets have been estimated using existing counts from Emeryville, Berkeley, Oakland, and Caltrans, as well as previous studies by others. Because traffic counts have not been performed as part of the General Plan, care should be exercised in using the numbers shown in Figure III-6. At best, the figure offers insight into the travel patterns of motorists and the relative use of Emeryville's streets.

Two features of the local street system merit some consideration. First, one should examine how well the street system functions. The ratio of vehicles traveling during the p.m. peak, when travel demand is greatest, to the capacity of the roadway provides such a measure. Referred to as the volume-to-capacity (V/C) ratio, this figure is measured at the intersection and suggests a level of service (LOS). The closer the ratio is to 1.00, the closer travel demand is to utilizing fully the available capacity. To simplify the presentation of level of service ratios, a letter rating scheme is used. LOS "A" indicates the V/C ratio is between 0.00 and 0.60, and traffic moves quite freely. Approaching greater levels of congestion and conditions of stop-and-go traffic are LOS "B" (0.61-0.70), LOS "C" (0.71-0.80), LOS "D" (0.81-0.90), LOS "E" (0.91-1.00), and LOS "F" (greater than 1.00). Figure III-6 shows the estimated intersection levels of service. In urban settings, LOS up to and including "D" are generally considered acceptable. Two intersections (Powell at Hollis and San Pablo at MacArthur) are at capacity (LOS "E"). The intersections along Powell Street between the frontage road and Christie are shown as operating at adequate levels of service (because the traffic entering the intersections theoretically do not fully use the intersections' capacity). In practice, however, these intersections function at LOS "D" or "E," because traffic at the freeway on-ramps back-up along Powell Street and hamper movement there. Similarly, truck traffic and turning movements may cause traffic delays, even though the V/C might not suggest congested conditions.

The second feature worth attention is safety. With many discontinuous streets, orientation is a problem for motorists. The number of streets merging around San Pablo, MacArthur, and Adeline is a prime example. It is not surprising that this area has one of the highest accident rates in the City. Safety is also a serious issue in areas where pedestrian activity is heavy. In the Triangle, east-west streets are inappropriately used as truck routes, and use of these residential streets by such traffic raises the risk of accidents.

City Arterial Streets. City arterial streets are intended to provide most of the City's required internal traffic capacity, carry the heaviest traffic volumes, and provide the most direct routes between internal and external places.

Collector Streets. This type of street would provide arterial access to residential neighborhoods and other development areas, but protect those areas from heavier through-traffic.

Local Streets. Local streets are intended to provide access only for the areas immediately adjacent to them and are planned to be free from use by through-traffic.

The local streets are integral with the development areas they serve. Local streets generally connect to other local streets or to collectors.

Intersection Improvements

5. The City should initiate a serious effort to improve the existing intersections that have an important future role in the street plan: Powell and Hollis, Powell and Christie, Powell at the I-80 interchange ramps, Bay at the Ashby Avenue interchange, Bay and 65th, San Pablo and MacArthur, and San Pablo and Yerba Buena.

Powell/Hollis Intersection. The intersection of Powell Street at Hollis Street is one of the most critical intersections in the Circulation Plan. If Hollis is to work satisfactorily as a two-way arterial street, so that Doyle Street can serve as a two-way residential collector, the capacity of Hollis Street and its intersection with Powell Street must be increased. In order to provide sufficient capacity, all four of its approaches probably will have to be widened. The south approach from Hollis will require, for northbound traffic only, two through lanes and two left-turn lanes. The north approach will require two through lanes, two left-turn lanes, and a separate right-turn lane for southbound traffic. The Powell Street approaches will require two through lanes, one left-turn lane, and two right-turn lanes for eastbound traffic from the west; and two through lanes, a left-turn lane, and a separate right-turn lane for westbound traffic from the east.

When trains pass through the intersection, they cause a loss of green signal time for waiting traffic. The capacity taken up by railroad use of the intersection could become critical in the future. It would be desirable to remove the tracks altogether, or move them to a less critical crossing.

Powell/Christie Intersection. The intersection of Powell Street and Christie Street will be the principal point of access between the Bayfront area and the Powell Street interchange. The existing interchange operates primarily as a three-approach, or T-type, intersection, although it has an additional one-way connection along Old Powell Street to Shellmound Street. The Circulation Plan changes the intersection to a full four-way intersection with through movements and left turns permitted from all four approaches. Widening will be required on all three of the existing approaches. The existing west approach on Powell Street has enough right-of-way to accommodate the widening that will be needed. The east approach on Powell Street will require some widening on the south side of the existing viaduct before it goes over the railroad. The widening will use a portion of the existing Old Powell Street right-of-way. Christie Street will require two lanes for traffic approaching the intersection from both north and south.

TABLE III-16: TYPICAL CURB-TO-CURB WIDTHS

<u>Street Type and Lanes Required</u>	<u>Curb-to-Curb Widths (feet)</u>		
	<u>No Parking</u>	<u>Parking One Side</u>	<u>Parking Both Sides</u>
<u>Arterials (two-way streets)</u>			
2 lanes with two-way left-turn lane	46	56	66
4 lanes with two-way left-turn lane	70	80	90
2 lanes with normal left-turn lane	40	50	60
4 lanes with normal left-turn lane	64	74	84
6 lanes with normal left-turn lane	88	98	108
<u>Arterials (one-way streets)</u>			
2 lanes	32	38	48
3 lanes	38	48	58
<u>Collectors (two-way streets)</u>			
2 lanes with normal left-turn lane	34	42	50
4 lanes with normal left-turn lane	58	66	74
<u>Local (two-way streets)</u>			
2 lanes	24	32	40

Note: Widths may vary significantly for specific segments to fit local conditions.

Powell/I-80 Ramp Intersections. The two existing intersections on Powell Street at the I-80 interchange ramps are less efficient than they could be because they are too close together. The condition is made worse by a third intersection, with the frontage road, which also is close. As part of Caltrans' plan for reconstruction of the interchange, it would be desirable to separate the two intersections with the I-80 ramps by a greater distance (approximately double the existing distance), and move the frontage road intersection even further west on Powell Street.

Bay/Ashby Intersection. The intersection that connects Bay Boulevard to the Ashby Avenue interchange will be another critical point of access for the Bayfront area. The Caltrans plan for the interchange shows Bay Boulevard as a two-lane street, but this Plan will require at least a three-lane approach to the intersection and two lanes in the opposite direction, or five lanes instead of two. The City should consider two possibilities. One is to connect a five-lane Bay Boulevard to Ashby Avenue just east of the interchange, which would place the intersection within the Berkeley city limits. The other is to connect Bay Boulevard directly to a set of interchange ramps at a location slightly south of Ashby Avenue and within the City of Emeryville. Either option could work satisfactorily, and the City should pursue the options with Caltrans and Berkeley.

Bay/65th Intersection. The intersection of 65th Street and Bay Boulevard includes the only main-line, at-grade railroad crossing in the Emeryville General Plan, and the intersection warrants special attention for that reason. When traffic is stopped on 65th Street for a passing train, it is important that 65th Street be cleared safely of vehicles before the train arrives at the crossing. It is important also that Bay Boulevard traffic be able to move freely while 65th Street is stopped. These requirements can be accomplished by:

- keeping Bay Boulevard as close as possible to the railroad tracks, so that 65th Street traffic from the east can be stopped back of the tracks and still be controlled by the intersection signals (railroad crossing signals and arms would be used, also);
- timing the signals to clear 65th Street before closing it for the train to cross; and
- providing an ample length of left-turn storage lane on Bay Boulevard north of the intersection so vehicles waiting to turn left into 65th Street while a train is passing will not block a through lane on Bay Boulevard.

San Pablo/MacArthur Intersection. The existing intersection of San Pablo Avenue and MacArthur Boulevard is inefficient because it has six approaches and is spread out over a large area. The combination of these two factors results in short signal phases, and long, unused clearance intervals, so that only a portion of the available signal time is actually used for moving traffic. The City should examine the following proposals for improving the intersection's capacity and efficiency:

- remove Adeline Street from the intersection in order to reduce the number of approaches and reduce the size of the intersection;
- further reduce the number of left turns in the intersection by prohibiting and re-routing some left-turn moves;
- increase the number of lanes on the intersection approaches;
- improve the route from Adeline to Hollis from the south;
- improve the connection from Adeline into Yerba Buena from the north; and
- add a connection from Yerba Buena to 35th Street near Magnolia and Peralta to bypass San Pablo.

San Pablo/Yerba Buena Intersection. Extending Yerba Buena Avenue directly north across San Pablo Avenue and into Adeline Street would provide more options for traffic going north on Yerba Buena and offer further relief for the San Pablo/MacArthur intersection. One of the critical features in maintaining adequate capacity through the intersections is to provide a sufficient number of lanes on San Pablo Avenue. Estimates indicate that the one-block segment of San Pablo between Yerba Buena and MacArthur Boulevard could require up to nine lanes, including left-turn lanes, or a street width of about 100-110 feet.

Seven lanes could be required in the block north of Yerba Buena Avenue, and in the three blocks south of MacArthur Boulevard.

There are several intersections outside the Emeryville city limits that could significantly affect traffic conditions on the Emeryville street system. In Oakland, the intersections of 35th and 36th Streets at San Pablo Avenue, Adeline Street, Peralta Street, and Magnolia Street, and the possibilities for changing them, could determine the options available for improvement of the San Pablo/MacArthur intersection. The San Pablo/Stanford/Powell intersection also is in Oakland. It is not so critical for capacity, but since the Emeryville General Plan calls for changing the use of Stanford Avenue in Emeryville, it would be appropriate to coordinate with the City of Oakland on its intended use of Stanford Avenue from San Pablo Avenue to the Emeryville city limit.

Two intersections in Berkeley have significant effects on traffic flow in Emeryville: one is Ashby Avenue at Seventh Street, which is the principal access to Hollis Street on the north; the other is the intersection of San Pablo and Ashby. It would be desirable to coordinate with Berkeley on its future plans for these two intersections.

Parking

Off-street parking facilities will be needed to serve and support the development and redevelopment that is being planned. Also, the necessity of removing curb parking from some arterial streets will make it necessary to move more parking spaces into off-street facilities. Important aspects to be addressed in planning off-street parking are the quantity of parking spaces to provide, the ownership and management of the parking, and the location and design of facilities.

The quantity of parking spaces should be sufficient for the anticipated demand, but not excessive or wasteful of space. In order to achieve the appropriate density of development and make the best-use of the land, it is necessary to reach an appropriate balance between the convenience of a maximum number of parking spaces, and the economy of a minimum number. Larger parking facilities that serve a variety of users are more efficient and economical than several smaller facilities that serve individual buildings, because the spaces in the larger facility can be shared by drivers who park at different times. The number of spaces needed can be reduced by increasing the average number of persons traveling in each car, and by changing automobile drivers to other modes of travel. Both are goals of transportation system management (TSM) programs.

In addition to curb parking controls and prohibitions that may be required at various locations throughout the City to solve local problems, some street segments in the Circulation Plan will require complete prohibition of curb parking. The purpose of removing curb parking is to maximize the capacity for moving traffic in the limited available street space and to move the parking into off-street facilities and minimize the right-of-way width.

Transit

Emeryville is served by AC Transit. The bus routes are illustrated on Figure III-5. Four of the routes offer commute service to San Francisco. Local service is provided by the "57M" serving the Peninsula, the Bayfront, Central Emeryville, and the Southern Border areas; the "57" serving the North End and the Triangle; and the "72" serving the San Pablo Avenue corridor. There will be opportunities to expand the existing bus service in Emeryville and increase the percentage of travel by public transit. Increased transit use will help to reduce traffic volumes at critical places on streets and interchange ramps. The Circulation Plan offers two special opportunities for increasing transit service. One is to add a new bus route through the Bayfront area. The other is to provide access to the planned HOV road at an appropriate location within the Bayfront area.

Pedestrian and Bicycle System

Emeryville is contained within a relatively small area, but the distances between various places within the City are not always short because the City is divided into relatively isolated parts by a main-line railway corridor, a freeway, and other rail lines and traffic arteries. Developing a network of attractive pedestrian and bicycle routes to overcome the barriers and link the major features in the various parts of the City deserves a high priority in the implementation of the General Plan, and could be considered the most important element of the Plan for bringing the parts of the City together into a cohesive whole.

Transportation Systems Management

Transportation Systems Management ("TSM") programs increase the efficiency of a community's transportation network by reducing the number of vehicles, increasing the capacity of the roads, and converting people from the single-occupant automobile to other commute modes. Such programs are used both in the Bay Area and around the United States as a means of mitigating the traffic, energy, and air quality impacts of large-scale development. TSM can also be used as a regulatory tool, ensuring that development of a given intensity will not overburden a community's transportation system. A combination of incentives and disincentives are usually used to achieve TSM program goals.

- synchronization of traffic signals
 - restrictions on driveway spacing
 - provision of off-street bus stops and turn-outs
 - selective truck routing
 - restriction of turning movements
 - signing and marking revisions.
- **Trip Reduction Measures.** Steps which decrease the quantity of traffic generated by a given project, accomplished by reducing single and double occupant vehicle use. The following steps should be considered:
 - enactment of ridesharing/carpooling/vanpooling programs
 - promotion of staggered work hours/flextime/compressed work week
 - establishment of preferential parking stalls for carpools and vanpools
 - mixing of land uses to reduce trip generation
 - construction of sidewalks, bike lanes and pedestrian walkways
 - mandatory construction of showers and bicycle storage facilities
 - bonuses for providing housing in conjunction with employment centers
 - promotion of employer-paid transit subsidies.
 - **Parking Management.** Reduction in parking requirements to encourage the trip reduction measures outlined above.
 - **Public Transit Provisions.** Improvement of transit service within the City to increase transit usage and reduce traffic; improvement of transit facilities, including passenger shelters; and provision of transit operating or pass subsidies.

The TSM Program for Emeryville can either be applied only to those developers who seek to build at a high intensity approaching the maximum floor area ratio (FAR), or to all developers of projects of a certain size within the city. In the former case, the developer would enact an individual transportation management (TM) program as a trade-off for more intense development. Each project owner would be responsible for carrying out and coordinating his or her own program. The owner would be fully responsible for the program's financial support and management. Operating costs would vary greatly depending on the extent to which vanpool and subscription bus service was used. City staff would be responsible for monitoring the individual programs. Compliance with the trip reduction programs may be enforced in a number of ways. A TSM ordinance may be prepared which specifies the measures to be taken and the goals to be reached. Fines may be placed on owners who do not take certain measures to reduce trip generation. Use of more severe penalties, such as denial of occupancy permits for failure to meet trip reduction goals, may also be explored. Past experience has shown that mandatory TSM participation is far easier to enforce than mandatory attainment of trip reduction goals.

The other approach, participation in a municipally-coordinated, areawide program, could be required of all new developments or establishments meeting certain size criteria. This type of program requires good program management and wide participation in order to be successful. An areawide Transportation

develop, implement, manage, and market an overall program for trip reduction. A TMO coordinator would work with employers to obtain commute data, establish ridesharing, flextime, and transit subsidy programs, and establish trip reduction goals. The coordinator would implement an areawide carpool matching program, and could implement an areawide vanpool program. The coordinator would also keep data on parking management, working with developers to minimize parking where feasible and provide alternatives to the single-occupant vehicle.

Membership and financial support for the TMO would have two categories: mandatory and voluntary. The distinction could be made along a number of lines but would most likely be based on the size of the project or the requested increase over the standard FAR. Financial support would probably be calculated on a square footage basis. Annual costs might be passed on to the tenant as part of the rent. A one-time fee would probably be incurred by the owner at the time of the project or permit approval to cover TMO expenses until the building is occupied.

The City staff should begin discussions with the staffs of Berkeley and Oakland to discuss the Bay Street extension over the railroad tracks at the south end of the City, the San Pablo/MacArthur intersection, and the Hollis/Ashby intersection. Given the development potential of the Bayfront area, some means of access other than via Powell Street is critical. If the City cannot reach agreement with Oakland regarding the Bay Street extension, which would cross the railroad tracks in Oakland, the City should evaluate other possible alignments to provide this southerly access to the Bayfront.

Pursuant to the Subdivision Map Act, the City can require of subdividers dedication of real property for roadways (Government Code Section 66475), bicycle paths (Section 66475.1), and local transit facilities (Section 66475.2). As a condition of approval of a final map or as a condition of issuing a building permit, the City can require payment of a fee to defray the cost of constructing bridges over railways and freeways, or constructing major thoroughfares (Section 66484). Prior to requiring such payments, the City would have to pass an ordinance that refers to this Element of the Plan and identifies those provisions which indicate such facilities are necessary. The ordinance must provide for public hearings for each area benefited to discuss the area boundaries, estimated costs for improvements, and method of apportionment.

A special assessment is a levy placed on a property to finance improvements that specifically benefit that property. Special assessments can be apportioned upon any basis which will reasonably measure benefits. These assessments are typically paid by property owners at the same time property taxes are paid. Special assessments are predominantly administered through the Improvement Act of 1911 assessment

proceedings, Improvement Act of 1911 bonds, the Municipal Improvement Act of 1913, and the Improvement Bond Act of 1915. An additional enabling act is the Landscape and Lighting Act of 1972.

An assessment district can be initiated either by the public agency governing body or by landowner petition. Section 22593 of the Government Code provides for written protest by property owners of at least 50% of the assessable land area to halt the proceedings. The same section also permits the governing body to override the protest by a four-fifths vote, if the findings conclude that the improvement is required for the public health.

When an assessment district is created, improvements are authorized, and property owners are assessed to finance the entire cost of the improvements. For improvements whose costs exceed the amount that could be conveniently raised from a single assessment (one lump sum), bonds are issued, and assessments are levied and collected in installments to pay the bondholders. The 1911 and 1915 Acts provide the mechanisms to issue bonds.

Assessments are intended to equal the amount of benefit the assessed property receives from a given improvement. The burden of the total assessment is "spread" to the beneficiaries of the improvements. Improvements required to serve future residents, without providing any benefit to existing residents, would be spread to owners of undeveloped parcels only.

E. PUBLIC FACILITIES AND SERVICES

Introduction

The efficient and timely provision of public services and utilities is essential for the physical development and well-being of a community. Services such as fire protection, law enforcement, and parks contribute to an area's "quality of life" and sense of civic pride. Other facilities such as sewers, water supply systems, and gas pipelines can inhibit development if not provided. Because of the importance of these services, the State Government Code includes several references to ensure their consideration in the preparation of a general plan:

- Section 65302(a) requires preparation of a land use element that must address the proposed general distribution and general location and extent of the uses of land for . . . recreation . . . education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land.
- Section 65302(b) requires preparation of a circulation element that should address the general location and extent of existing and proposed . . . local public utilities and facilities.

- Section 65302(d) requires preparation of a conservation element that may address flood control and prevention, and control and correction of the erosion of soils, beaches, and shores.
- Section 65302(e) requires preparation of an open space element that must plan for, among other things, outdoor recreation.
- Section 65302(g) requires preparation of a safety element that must address protection from fires and other hazards.

This section describes the various services in Emeryville and suggests how their future provision will affect development in the City. Further discussion of life safety is found in the Public Health and Safety component.

Public Facilities (as of 1984)

The City's public facilities are illustrated on Figure III-9.

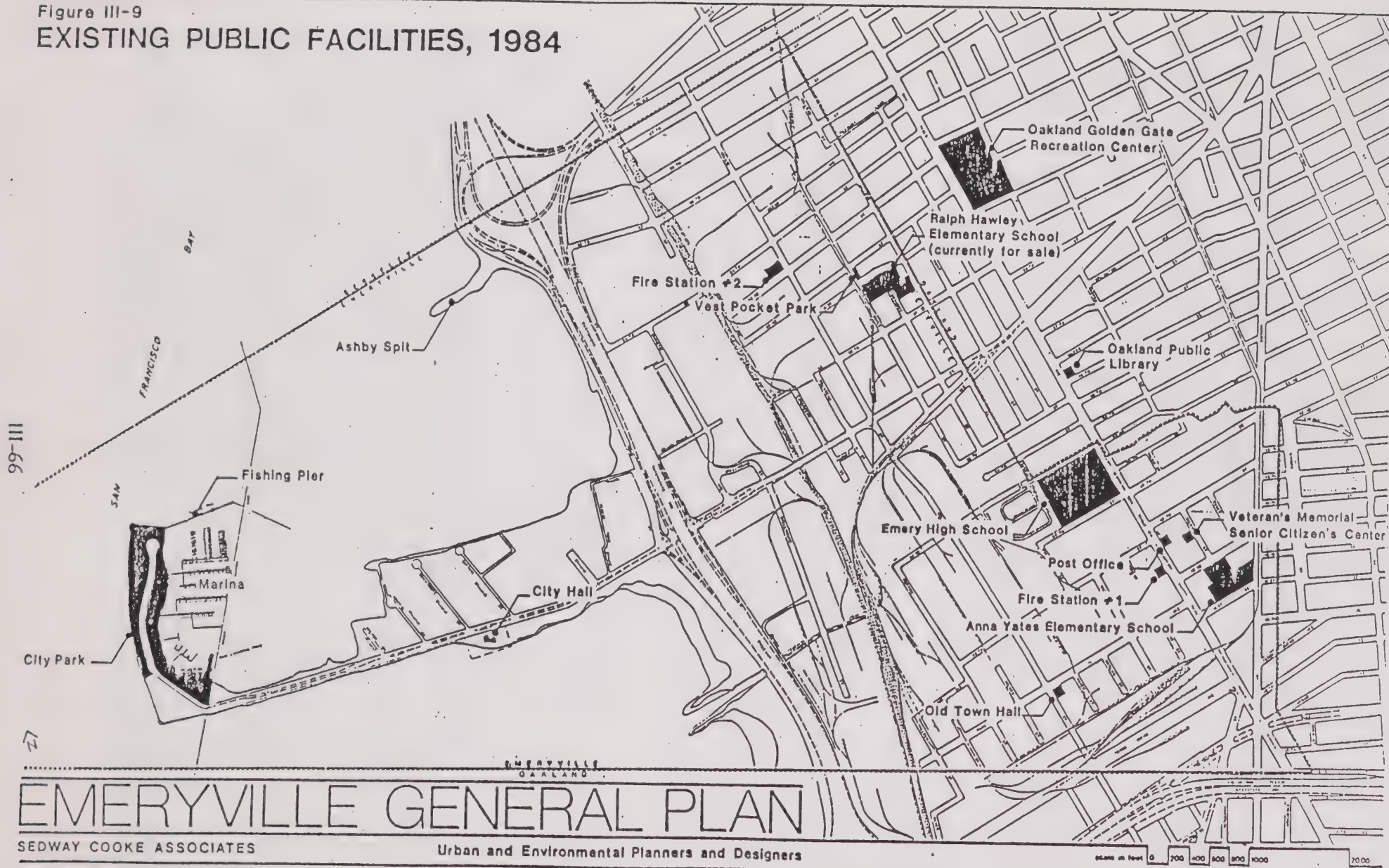
City Government Facilities. The City's governmental offices are currently located in two separate locations. The Old Town Hall is located in a light manufacturing district at 1333 Park Boulevard and houses the Redevelopment Agency, the Public Works Department, and the Housing Rehabilitation Department. The new City Hall (at 2449 Powell Street) is on the Peninsula, separated from much of the City except for the Watergate complex. This facility houses the City Council chambers, the Mayor's office, the administrative offices (e.g., the City Manager, City Clerk, City Attorney, Finance Director, etc.), and the police department. The City does not have a corporation yard or operate any public parking facilities.

Schools. The City is served by the Emery Unified School District, which operates two schools. All students of grades K-6 attend Anna Yates Elementary School at 41st and Adeline Streets. Current enrollment is 201 students. The roughly two-acre site has a maximum student capacity of approximately 275. High school students (grades 7-12) attend Emery High School at 1100-47th Street. Current enrollment is estimated at 249 students and maximum capacity is about 400. The teacher/student ratios at each school are at or better than the average State levels. The School District also owns another facility, the Ralph Hawley School, in the North End at 1275-61st Street. The District is currently leasing this facility to a private school.

This District has undergone a number of recent changes triggered by insufficient funds in past years. Formerly one of the top-financed districts in the state, the District has seen its teaching staff fall from 21 to 14 to its present level of eight. Concurrently, a number of classes and programs were reduced, and enrollment has been dropping. The District is now on a strict fiscal management program and is making major efforts to re-attract students. The school curriculum is being revamped and includes a variety of new programs and classes.

Given the District finances and the City's small student population, there are no plans to expand the existing school facilities. The possibility of such expansion would need to be considered if future development in Emeryville were to accommodate family households.

Figure III-9
EXISTING PUBLIC FACILITIES, 1984



Recreation Facilities. Emeryville's public open space and outdoor recreation resources consist of a few parks and pedestrian walkways, schools, and some privately and publicly owned shorefront land. The existence of private facilities such as health clubs or tennis courts has not been documented below, since these facilities do not serve the entire City.

Parks. The City operates two recreational facilities. One is a 10,000-square-foot "vest-pocket park" at 62nd and Doyle Streets. It contains play equipment for young children but no open play area. The City's other facility is a landscaped picnic area at the tip of the Peninsula. The area includes the City's Marina which offers boat docks, fishing piers, and Jining areas. This facility serves not only residents of Emeryville but also persons from the greater urban area. A pedestrian/bicycle path was constructed along the southern shoreline of the Peninsula in 1986, as required by the BCDC when the new City Hall was built.

Schools. Schools often represent the only open space or recreational facilities in Emeryville's older residential areas. Anna Yates School in the Triangle at 41st Street includes a small paved playground. The school buildings and playing fields of Emery High School occupy eight acres of land. The Ralph Hawley School site in the North End fills almost two acres of land. This property is currently leased by the School District to a private school.

Ashby Spit. The Ashby Spit is a narrow strip of land totaling about 3.5 acres. Although privately owned and undeveloped, the area has been used by people for sightseeing, fishing, clam digging, and jogging. The Spit offers a panoramic view of the Bay and opposite shorelines. A fence currently prevents unauthorized access.

North Frontage Road. Along the Frontage Road is a narrow strip of concrete debris and makeshift riprap often used by people who are fishing or sightseeing. This location also offers an exceptional view across the Bay.

East Bay Shoreline Park. For the past 20 years, citizens' groups in the East Bay have been working toward increasing access to the Bay. These efforts culminated in a specific proposal, prepared by the State Department of Parks and Recreation and the State Coastal Conservancy, for a park along the East Bay shoreline, which was presented to the California Parks and Recreation Commission in March 1980. The park would extend from the southern Contra Costa County line to the Oakland Bay Bridge toll plaza. Its major feature would be a bicycle/pedestrian pathway from one end to the other.¹ With passage of the California Parklands Act of 1980 (SB 624, Nejedly), which was Proposition 1 on the November 1980 ballot, the State Parks and Recreation Commission formally recommended in March 1981 that the East Bay shoreline proposal be given top funding priority.²

¹Ken Collier, Planning Division, California Department of Parks and Recreation, November 16, 1984.

²California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, pp. 2, 7.

The Department of Parks and Recreation published a feasibility study which defined specific recommendations for the proposed park. Within Emeryville, the State recommends that a pathway be built along the North Frontage Road south to Powell Street. South of Powell Street, the State's proposals identify two alternatives: first, that the path continue through the Emeryville Crescent to the San Francisco-Oakland Bay Bridge toll plaza; and second, that the path follow alternative routes through Emeryville to Oakland.

The feasibility study also recommended the acquisition and development of the Ashby Spit (three acres) for a passive recreation area and 12-car parking area, the shoreline strip between the Spit and the Peninsula (four acres), and the Peninsula's southern shoreline for pedestrians and bicyclists. The study suggested that the Emeryville Crescent (500 acres in Emeryville and Oakland) should be acquired as part of the San Francisco Bay Wildlife Refuge System, with the U.S. Fish and Wildlife Service or the California Department of Fish and Game responsible for its management. Controlled public access would be necessary to protect the fragile environment.¹

Recreation Planning. Planning for open space and outdoor recreation involves a number of factors: the needs and desires of the community, the availability of land, financing mechanisms, maintenance costs, accessibility and safety, to name a few. The City of Emeryville with a population of nearly 5,000, is equivalent to a good-sized neighborhood in other communities and would need a neighborhood park of 4-8 acres, according to national standards. However, Emeryville's population is not evenly distributed. Over half the population is located in the Watergate complex and the Pacific Park Plaza condominiums, both of which offer recreational facilities to residents. Peninsula residents also have good access to the shoreline and the City Marina. The balance of the population is concentrated along a band in the North End and in the Triangle, subareas which are separated by a heavily travelled street. These areas are served only by school facilities, to the extent they are accessible, and the vest-pocket park on Doyle Street. Residents of these neighborhoods include proportionally more families and elderly than either Watergate or Pacific Park Plaza. Their income levels and their access to transportation are also more limited than the newer residents. Accordingly, the recreational needs of East Emeryville are not being satisfied adequately. Moreover, the desire for more and better facilities was clearly expressed in a questionnaire distributed at a community meeting. The results of that questionnaire indicate that the shortage of outdoor and indoor recreational opportunities are among the mostly frequently perceived problems in Central Emeryville, the North End, and the Triangle.² Consequently, recreational opportunities must be considered in future land use decisions and within large-scale development projects.

Cultural and Social Facilities. The City's Senior Citizen Center in the Veterans' Memorial Building offers a variety of programs for anyone over 60 years old. Although it primarily serves Emeryville residents, the program is open to all senior citizens. Specific services offered by the center include physical fitness and health

¹ California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 3.

² See Sedway Cooke Associates, Citywide Goals and Objectives, January 1985, for a Summary of the Responses to the Questionnaire.

classes, Medicare counseling, health examinations, hot meals, legal services, and social activities. The center also distributes taxi vouchers at a discount to help meet the transportation needs of the area's elderly. The primary funding source is the Older Americans Act (especially Titles 3 and 5). Other funding sources include federal revenue sharing, City general fund appropriations, and private donations.

The City's Child Care Program is funded by the State Department of Education and the City. It currently provides day care for children under five years old at the Ralph Hawley School site; however, given the uncertainty of the site's future, the program is in need of a permanent location. Because of this uncertainty, the program has not accepted new children, in spite of a waiting list of approximately 150. Fees for child care are based on the parents' income in accordance with a sliding scale established by the State.

The City does not have a public library or community center, although meeting areas are available at the high school and in a few of the newer residential complexes.

Public Safety

Fire Protection. The Emeryville Fire Department operates two fire stations. One is at 6303 Hollis Street, between 63rd and 64th Streets; the other is at 4331 San Pablo Avenue, between Park Boulevard and 45th Street.

The time required to respond to calls is generally kept within a three-minute limit, which is accepted as an adequate standard. However, access to the Bayfront area and the west side of Interstate 80 is constrained by traffic congestion on Powell Street, especially during the afternoon rush hour when response times have reached a high of seven minutes.¹ Although there are other routes besides Powell Street across the railroad tracks, these crossings, at 64th and 65th Streets, are unreliable because trains block the crossings at unscheduled intervals. Afternoon commute hour traffic can also present a problem for a fire truck attempting to enter or cross San Pablo Avenue from Fire Station #1. In addition, the median strip prevents immediate access in both directions.

Police Protection. The Emeryville Police Department is stationed in the new city Hall, approximately 2-3 minutes for top-priority calls from anywhere in the City.

Solid Waste Disposal. There are no landfill or transfer stations located in the City. Solid waste collection and disposal in Emeryville is performed by Oakland Scavenger Company, which hauls the garbage to a transfer station in San Leandro.

Stormwater Drainage. The City's drainage system collects the stormwater runoff and discharges it into the Bay at three locations: west of the freeway opposite 65th Street; near the south side of the Powell Street interchange, and at Temescal Creek. Demand on the storm drain system is greatest during periods when heavy rainfall is combined with high tides. Although the outfall lines appear to have the capacity to handle at least a 10-year storm, the collection system, in certain areas, lacks the ability to adequately transport the runoff to the outfalls. This is particularly evident in Christie Avenue north of Powell Street, where localized flooding

¹Ray Vittori, Fire Chief, Emeryville Fire Department.

occurs during heavy storms. The current capacity of the 54" outfall along Powell Street is severely impaired because of heavy siltation, and runoff is forced into a 60" relief pipeline that runs to Temescal Creek.

It is not anticipated that future development would increase the volume of runoff, because of the current "built-up and paved-over" nature of the entire area. Individual development would likely improve the collection system that connects to the outfall lines. There are no stormwater detention ponds or facilities located in the City.

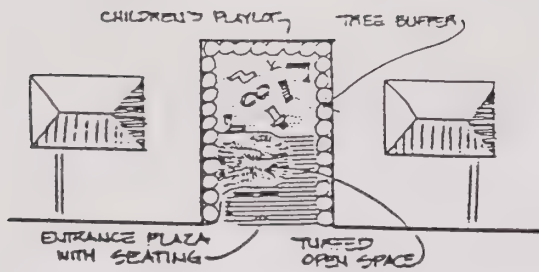
Public Utilities

Water Supply. The supplier of domestic water to the City is East Bay Municipal Utility District (EBMUD) which owns, operates, and maintains the existing system. The main water supply line is a 36"-diameter line in Hollis Street. The distribution system consists mostly of 8" and some 10" lines that create "loops" in a limited number of areas. At present, there are no identifiable, significant deficiencies in the system in terms of primary use for residential and nonresidential use or for emergency supply. However, many of the existing cast iron lines were installed in the 1920s and 1930s. These lines are replaced as needed when they fail, and are up-sized and replaced as required by development. Future flow increases can be handled by the 36" main in Hollis Street and no additional pump stations or reservoirs are required.

Wastewater Treatment. The existing sanitary sewer system consists of a series of collector lines running from east to west which are fed by laterals and a few north-south collectors. The main collector lines run westerly to Interstate 80 where they connect to a major interceptor pipeline that ranges in diameter from 66" just south of Ashby to 84" south of Temescal Creek. This major interceptor conveys wastewater to the EBMUD Sewage Treatment Plant in Oakland. The collector lines are owned and maintained by the City of Emeryville and the interceptor is owned and operated by EBMUD. Sewage from the City of Oakland, upstream from Emeryville, also flows in those collectors.

Because of a serious inflow/infiltration (I/I) problem, peak wet weather flow pushes the system beyond its capacity during major storms, resulting in raw sewage overflows. In an effort to control this problem, EBMUD is conducting an East Bay I/I study that will culminate in a 20-year capital improvements program specifying programs to rehabilitate publicly-owned sewer mains, construct relief sewers to increase capacity during wet weather, and rehabilitate privately-owned building laterals.

Other. Gas and electric service is provided by Pacific Gas & Electric Company. Gas mains are located underground within public rights-of-way. Electrical service is transmitted via underground and overhead utility lines. Telephone service is provided by Pacific Bell. There are no major generation, transmission, or distribution facilities in the City.



MINI-PARK
(2,000 to 10,000 square feet)

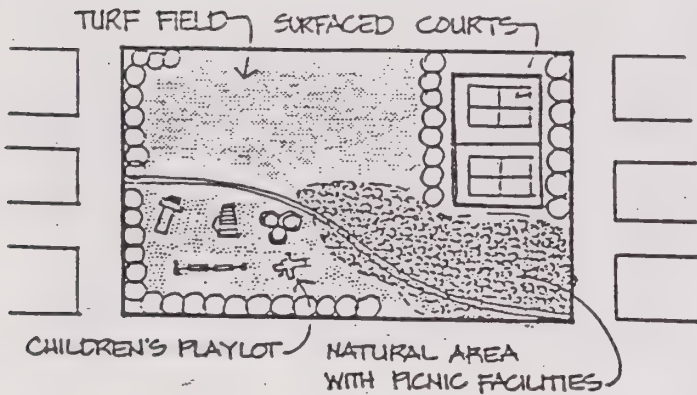
Typical Facilities

- toddler play area
- benches/seating
- basketball
- multi-use courts
- landscaping

Primary Users

- toddlers and parents
- children aged 5-14
- elderly

Maximum Optimal Distance
From Users: 1/4 mile.



MEDIUM-SIZED PARK
(1 to 2 acres)

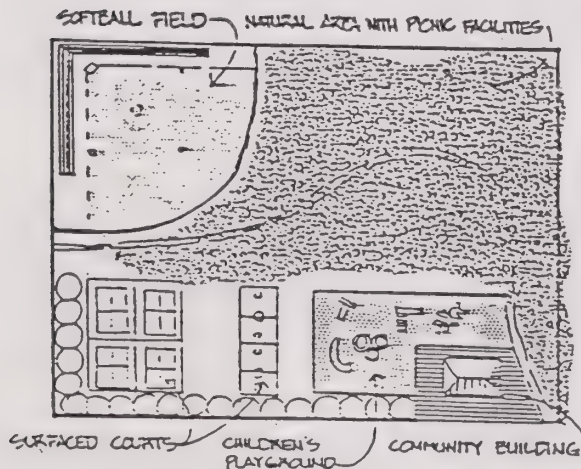
Typical Facilities

- toddler play area
- playground for older children
- multi-use courts
- multi-use playing field
- natural and landscaped areas with picnic facilities.
- benches/seating

Primary Users

- toddlers and parents
- children aged 5-14
- elderly

Maximum Optimal Distance
From Users: 1/2 to 1 mile.



LARGE PARK
(2 to 5 acres)

Typical Facilities

- toddler play area
- playground for older children
- tennis courts
- basketball courts
- softball field
- community building for programming
- natural and landscaped areas with picnic facilities
- benches/seating

Primary Users

- toddlers and parents
- children aged 5-18
- adults aged 18-39

Maximum Optimal Distance
From Users: up to 2 miles.

Figure III-11
RECREATION AREA PROTOTYPES

EMERYVILLE GENERAL PLAN

Implementation

The Redevelopment Agency may acquire land, manage property, relocate people and businesses, clear land, prepare sites, build facilities, sell land, and rehabilitate buildings and structures (City Redevelopment Agency). To finance the improvements, the Redevelopment Agency can use property taxes from the redevelopment area, the sale of tax allocation bonds, mortgage revenue bonds, special assessments, developer contributions, and lease-purchase agreements.

The Mello-Roos Community Facilities Act authorizes local governments to levy special taxes within newly created community facility districts and to use the funds to pay for virtually any capital construction (City). The special taxes could also be used as a financing vehicle for operating and maintenance costs for police, fire, parks, recreation, and parkways. The bill also authorizes the local government to issue bonds backed by these special taxes, which require passage by a two-thirds majority vote by the registered voters residing within the boundaries of the Community Facilities District.

As defined by Government Code Section 65864, a development agreement would allow the City to enter into agreements with developers in which the City effectively promises not to change its planning or zoning laws applicable to the development for a specified period of time, in return for a commitment on the part of the developer to construct specific improvements, provide public facilities and services, develop according to a specified time schedule or make other commitments which the jurisdiction cannot ordinarily require of the developer.

Development agreements offer certainty in the development process: it assures the City that certain conditions it wishes to impose on the project (such as scheduling or provision of public facilities) will be performed, and it assures the developer that planning or zoning laws affecting the project site will not change.

The agreements are particularly appropriate for large multi-phase developments where the developer will be required to make substantial investments for public facilities. They essentially reduce the financial risk to the City by assuring that the improvements promised by the developer will be implemented even if the development fails financially.

Dedications and exactions permitted by the Subdivision Map Act (City) are:

- streets, drainage, public utility easements, and public easements (Government Code Section 66475);
- access to waterways, rivers, and streams (Government Code Sections 66478.4 and 66478.5);
- drainage and sanitary sewer facilities (Government Code Section 66483);
- bridges and major thoroughfares (Government Code Section 66484); and
- park and recreational purposes if the parks and recreational facilities are consistent with this Plan (Government Code Section 66477).

Similarly, possible locations for public facilities such as the civic center, schools, fire stations, and libraries can be reserved by local ordinance in accordance with Government Code Section 66479. A requirement for reservation of real property for the public uses indicated can be imposed if such requirement is based upon an adopted public facilities element, and if the reserved area is of such size and shape as to permit the balance of the property to develop in an orderly and efficient manner. The amount of land reserved cannot make development of the remaining land held by the subdivider economically infeasible. Upon approval of the final map, the City and the developer will agree to acquire the reserved area within two years after the completion and acceptance of all improvements, unless this time period is mutually extended.

F. LAND USE

Introduction

Given the earlier discussions of population and employment growth, and demand for public facilities, the crucial question is: how much land is needed to meet the future demand for residences, commercial businesses, industrial enterprises, recreation, and public services? The Land Use Element is intended to allocate sufficient area to accommodate Emeryville's future needs, to establish appropriate building intensities, and to minimize the impacts associated with incompatible uses located adjacent to one another.

Specifically, the Land Use Element, as set forth in Government Code Section 65302(a), must designate the proposed general distribution and general location of the uses of land for housing, business, industry, open space, education, public buildings and grounds, and other categories of public and private uses of land.

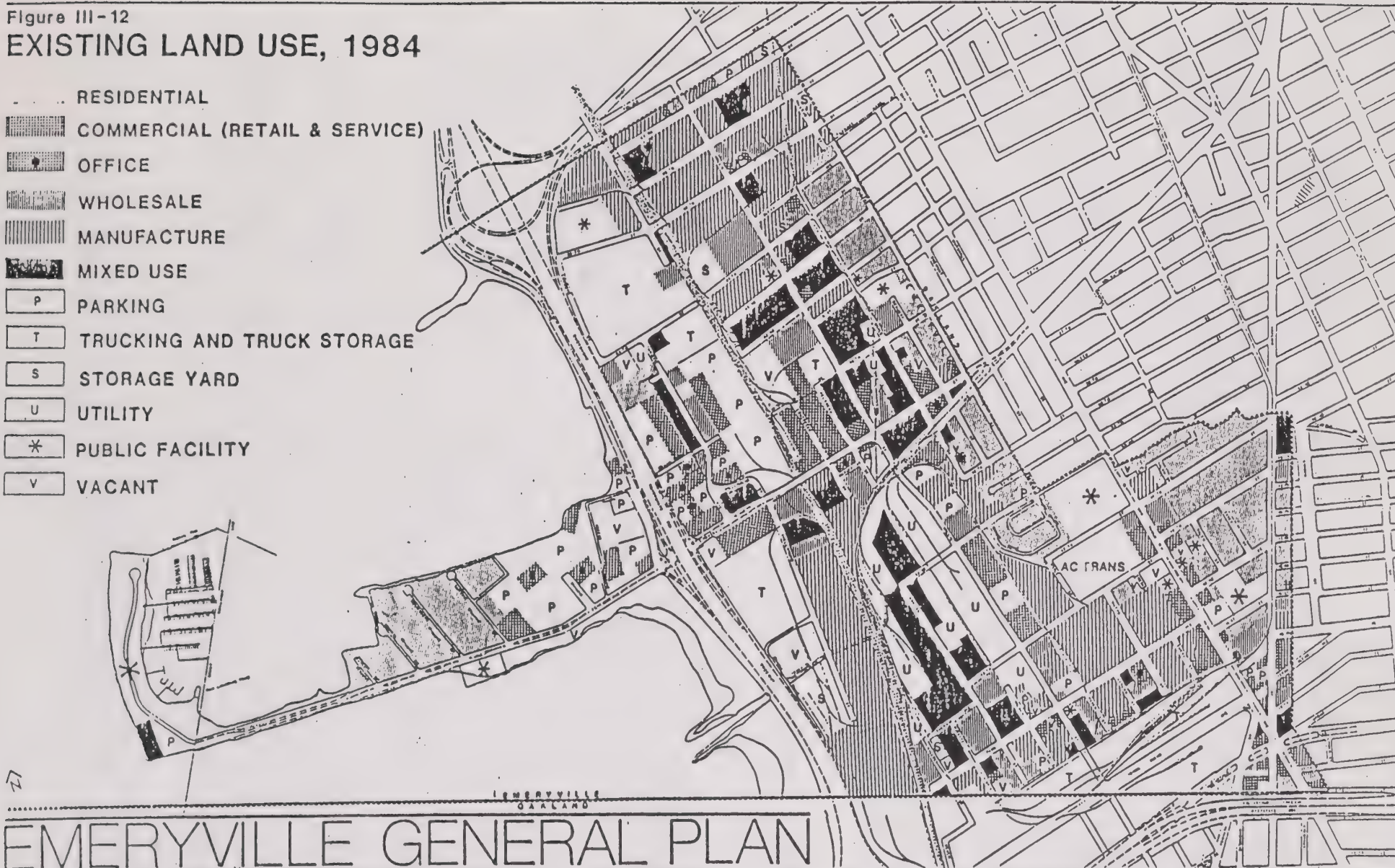
Land Utilization

Existing Uses. Incorporated in 1896, Emeryville originally was part of a large Spanish land grant. The City's excellent rail and highway access and its proximity to the region's major centers of commerce has continued to be attractive to manufacturing and other transportation-sensitive industries. The land portion of the City occupies 750 acres, with 340 acres or 45% of the total land occupied by manufacturing and wholesale activities, and 98 acres or 13% by residences. Development patterns, building types, railroad tracks, and Interstate 80 divide Emeryville into three subareas: the Peninsula, the Bayfront and East Emeryville. Within these subareas, the land uses tend to occur in discrete bands. Figure III-12 shows the City's current land uses; Table III-19 summarizes the acreage by use. A brief description of the subareas' predominant land use patterns is presented below.

Figure III-12

EXISTING LAND USE, 1984

- RESIDENTIAL
- COMMERCIAL (RETAIL & SERVICE)
- OFFICE
- WHOLESALE
- MANUFACTURE
- MIXED USE
- P PARKING
- T TRUCKING AND TRUCK STORAGE
- S STORAGE YARD
- U UTILITY
- * PUBLIC FACILITY
- V VACANT



EMERYVILLE GENERAL PLAN

SEDWAY COOKE ASSOCIATES

Urban and Environmental Planners and Designers

SCALE in feet 0 200 400 600 800 1000 2000

TABLE III-19: EXISTING LAND USE, 1980

<u>Land Use</u>	<u>Acreage</u>	<u>% of City Total</u>
Manufacturing, warehousing, and transportation services	337.4	45.0
Residential	97.5	13.0
Office, retail, and commercial	75.0	10.0
Public facilities	13.6	1.8
Open space, recreation	75.0	10.0
Public rights-of-way	<u>151.5</u>	<u>21.0</u>
Total Land Area	750.0	100.0

Source: City of Emeryville, Final Environmental Impact Report on the Redevelopment Plan, August 1983, p. 32.

The Peninsula. The Peninsula comprises the entire land area west of Interstate 80 and consists entirely of bay fill. This area was originally a railroad pier built in the early 1900s. No solid land existed west of what is now the freeway until 1931 when a second pier was built just north of the first and the space in between was filled. Later that same decade, filling activity was resumed to construct the original marina. Between the 1930s and 1974, when bay filling became illegal, the Peninsula continued to grow and change shape on a regular basis.¹ During this time, the primary land uses were mostly recreational with some light industry. In the mid-1970s, an intensive redevelopment process began with construction of the Watergate apartment complex (later to be converted to condominiums), followed by construction of several high-rise office buildings, a major hotel, and several freestanding restaurants. Today, little remains of the Peninsula's historic land uses. The marina is still there in a much expanded form, and a park at the Peninsula's tip is one of the City's only major recreation and open space areas.

The Bayfront. The Bayfront is a band of land wedged between Interstate 80 on the west and the railroad tracks on the east. Like the Peninsula, the Bayfront land uses have been strongly influenced by the area's proximity to the bay and the freeway. However, here the redevelopment process has been less intensive and less pervasive. There are several relatively new mid-rise office buildings and commercial businesses clustered around the intersection of Powell Street and Interstate 80. With the exception of the Pacific Park Plaza condominiums, these buildings are surrounded by

¹ Doris Sloan, ed., The East Bay Shoreline: Selected Environmental Issues, June 1982.

one- and two-story buildings accommodating trucking, wholesaling, and some manufacturing operations, ranging from the very small, with only one or two employees, to the very large, with over 500. Only a few business service activities that might serve the high-rise office buildings are in operation, including two print shops and several graphic designers. In general, these more intensive office activities within the Bayfront exist in spite of the traditional land uses, i.e., the trucking terminals, wholesalers, and manufacturers, with no mutual benefit or major conflict.

East Emeryville. East Emeryville encompasses a portion of the City east of the railroad tracks. This subarea has three major land uses that strongly contrast with each other. The first is manufacturing which also includes a smaller proportion of wholesaling and other business uses. Due to zoning restrictions, these activities are primarily contained between the railroad tracks and Doyle Street with a few exceptions along San Pablo Avenue and Adeline Street. The second major land use is the City's residential neighborhoods which lie east of Doyle Street and include the "Triangle" formed by San Pablo Avenue, Adeline Street, and the city limits. The third major land use is the retail commercial strip along San Pablo Avenue and Adeline Street.

Prospects for the Future. The following discussion considers how demand for non-residential land is expected to change in Emeryville. Residential land demand is discussed in the Housing Element.

Manufacturing. Manufacturing has been Emeryville's primary land use for over a century. This sector also dominates the City's economy, accounting for 42% of the total business establishments and 44% of total employment. Within the manufacturing sector in Emeryville there are six major subsectors including food, furniture, printing, chemicals and allied products, primary metals, and machinery, as well as a small but blossoming arts and crafts sector. There are several key factors that manufacturing businesses consider in selecting their plant location. Most manufacturing activities want to be close to either their source of raw materials or the market for their finished product. Because of Emeryville's location close to the geographic center of a large metropolitan region, it is a perfect location for firms with a broad market within the region. A second factor that works in conjunction with location is transportation access. Emeryville's proximity to the region's major highways and railroad lines makes it easy for companies to transport supplies and finished products. A third factor is the supply of space available for manufacturing activities. Until recently, land and space in Emeryville were relatively inexpensive and readily available, making the City a particularly good place for firms to start up.

The future manufacturing land use pattern will depend a great deal on where each subsector is in its business cycle. The food and primary metals sectors are both in the declining end of the cycle. This means that the market for these products has peaked and begun to wane. A number of food processing and primary metals operations have already closed around California. This would leave a considerable amount of space available for redevelopment either by other manufacturing firms or different land uses in Emeryville.

The machinery and parts subsector and the chemical and allied products subsector are considered mature industries in that their markets have probably reached their peak size. Firms in this category are still healthy but they are not expanding and are likely to begin declining over the next five to ten years, unless they modify their product lines to satisfy a changing market. Pfizer Chemical's operation is probably the best example of a mature industry.

Growth industries, i.e., companies with rapidly expanding markets, are also visible in Emeryville. These companies are likely to occupy space vacated by the declining industries, as well as creating pressure for new space to meet their different needs. The bio-technology research companies typify the new growth industries. These industries often have very different space requirements than the old manufacturing firms and they are not as transportation dependent since their goods are generally small and lightweight. Instead, other amenities including retail shops, restaurants, and open space have replaced some of the more traditional factors in location decisions.

Another important growth industry is Emeryville's burgeoning arts and crafts community. This group includes everything from custom furniture makers to painters and sculptors. While fine arts and crafts people are not manufacturing industries in the conventional sense, they are included here because they have special spatial requirements related to producing a specific type of product. Like the conventional manufacturing operations, arts and crafts people need inexpensive space where they can work, and sometimes live, without disturbing anybody.

Wholesaling. Wholesaling is another major sector in Emeryville from both a land use and an economic perspective. About 25% of the business establishments are in wholesaling and account for 11% of the City's total employment. Like manufacturing, this sector comprises a broad spectrum of activities and land use requirements. The range of activities includes trucking, warehousing/distribution, and manufacturers' representatives.

Trucking and warehousing/distribution are both very space intensive and reliant on good transportation access. Therefore, the City's comparative advantages regarding these factors have attracted many trucking and warehousing businesses. Most of these firms are concentrated in the Bayfront where they occupy much of this area's prime land. The large trucking companies, in particular, are directly adjacent to the freeway and are not crowded by the manufacturing operations clustered along the east side of the railroad tracks.

These two activities, more than any others in the City, are being displaced by completely different land uses as part of the City's redevelopment. There are two main reasons for this phenomenon. First, these industries require a lot of land but not a lot of investment in buildings or machinery. Consequently, they are very sensitive to land costs. If land costs increase dramatically, as they have in the Bayfront, trucking and warehousing will be displaced by land uses that can afford higher land costs. Second, trucking and warehousing industries are undergoing a restructuring process all over the country where distribution points are being centralized in non-metropolitan areas. Much of the Bay Area's trucking and warehousing businesses have moved to Sacramento or the Central Valley where land is cheaper and several metropolitan areas can be served from a central location.

Offices. This sector includes most business activities that occur in office buildings, including finance, insurance, real estate, and professional services like lawyers. In Emeryville, these activities are concentrated in the high-rise and mid-rise office buildings immediately east and west of Interstate 80. Although the tenants of these buildings may have no direct relationship to each other, the buildings themselves do have a relationship in that they create a distinct identity in the real estate market. If and when more buildings are built, particularly in the Bayfront area, Emeryville's identity as an industrial center will become increasingly less preeminent and the City's image as an office center will be enhanced. This enhanced reputation will help the marketability of all office space within the City.

Concentrations of office buildings also generate demand for certain types of business services like print shops, delivery services, and office machine repair. Like retail and personal services, these business services require certain office population densities and must be located in close proximity to their customers. Although the office density in Emeryville is not yet high enough to support a full range of business services, there are a few in the Bayfront area. If office development continues, more of these service businesses are likely to move into Emeryville.

Retail and Commercial. Retail and commercial activities, primarily personal services, are very dependent on being close and/or easily accessible to the population they serve. Some forms of retail and commercial activity benefit from being near residential areas while other activities tend to cluster near offices or other business establishments. In either case, the size of the population to be served is an important factor in determining the types of goods and services that are available. A population's disposable income is also a very important consideration to retailers. Because the residential population of Emeryville has historically been very small and was considered to have limited buying power, no major retailers, like supermarkets, chose to locate in the City. Except for a few corner locations such as at the Watergate complex and the Marketplace, most of Emeryville's retail and commercial enterprises are located on San Pablo Avenue or Adeline Street where they are accessible to Oakland residents and are visible to large numbers of drivers. Regional retail activities are typically found in conventional shopping centers and the large freestanding specialty or discount retail businesses that attract customers from a regional market area. Paramount to these concerns are convenience to the regional transportation system and visibility.

Areas Susceptible to Change. Because the factors affecting land use are numerous and complex, it is helpful to establish a simple measure for assessing potential change against which other factors can be weighed. One widely used measure is the ratio of investment, or improvements, on a given piece of land to its land value (I/L ratio). It gives an indication of how much the improvements, e.g., buildings, are worth relative to the value of the land. Using information available to the public from the county tax assessor, the ratio is calculated by dividing the assessed value of any individual parcel improvements by the land value. If the improvements and the land are worth the same, the I/L ratio equals one. If the improvements are worth twice as much as the land, the ratio equals two, and so on. Generally, when the improvements are worth less than the land, the property is more valuable for its potential rather than its current use. Therefore, market forces begin asserting pressure, and the land is likely to be sold or redeveloped for a more intensive use commensurate with the land value. Since passage of Proposition 13, property taxes are based on 1978 assessment values which are allowed to increase by 2% each year. A parcel can be reassessed at its full market value only when it is sold. If the assessed land values were inflated to reflect their current market value, the I/L ratio would be lower and many more parcels would be in the underutilized category than appear now.

The I/L ratios for all nonresidential parcels in Emeryville are shown in Figure III-13 and summarized in Table III-20. Patterns emerge in different areas of the City, highlighting where change is likely to occur, where it has already occurred, where it might occur five years from now, and what the exact land supply will be for each category.

TABLE III-20: LAND UTILIZATION BY SUBAREA (acres)

	<u>Peninsula</u>	<u>Bayfront</u>	<u>East Emeryville</u>	<u>City Total</u>
Underutilized	40.8	74.1	88.7	180.7
Marginal	0	16.2	44.3	60.5
Stable	59.5	30.2	84.4	174.1

Source: Sedway Cooke Associates, 1984.

Parcels with a ratio of less than 0.90 are the most likely to undergo immediate change. They are often typified by businesses in the declining phase of their business cycle and where land values have begun to rise as Emeryville has begun to attract more intensive development. This has already begun to happen in the Bayfront area. As described earlier, many wholesaling distribution operations have found it more cost-effective to centralize their distribution points in non-metropolitan areas where land is less expensive. It is these parcels that can be considered as the land supply available for redevelopment. Other locations that are expected to be available include lands owned by utilities and transportation companies, such as PG&E and Santa Fe, respectively. PG&E controls 13.5 acres of prime land along Hollis Street near the Old Town Hall. Santa Fe owns a considerable amount of land along Yerba Buena Avenue that is currently used by some trucking companies, primarily as storage areas.

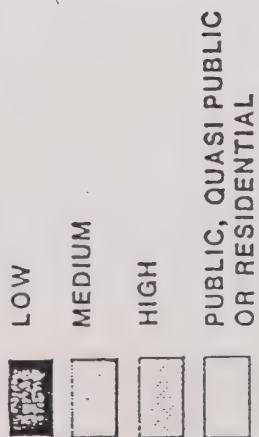
Those parcels with ratios of 0.90 to 1.40 have improvements valuable enough to sustain their current uses under present market conditions. Fewer are for sale than those with lower ratios and many buildings that are sold are rehabilitated instead of demolished. Most buildings with ratios of 1.11 to 1.40 are older structures possessing intrinsic aesthetic quality, making them good for adaptive reuse.

In an area like Emeryville where there is considerable development activity, property values are beginning to increase considerably. Based on the limited information available from recent land sales, property appears to be selling at about three times its assessed value. If the land portion of the parcel's assessment were inflated to reflect this increase, then the ratios on all property in the marginal range would drop into the underutilized category. This indicates that with changing market conditions, properties now considered relatively stable could become underutilized, paving the way for some form of reinvestment and land use change. However, because most of the buildings on parcels in this range lend themselves to adaptive reuse, very few will be removed to make room for new structures. Consequently, building square footage, rather than land acreage, is more representative of the development potential of the marginal parcels.

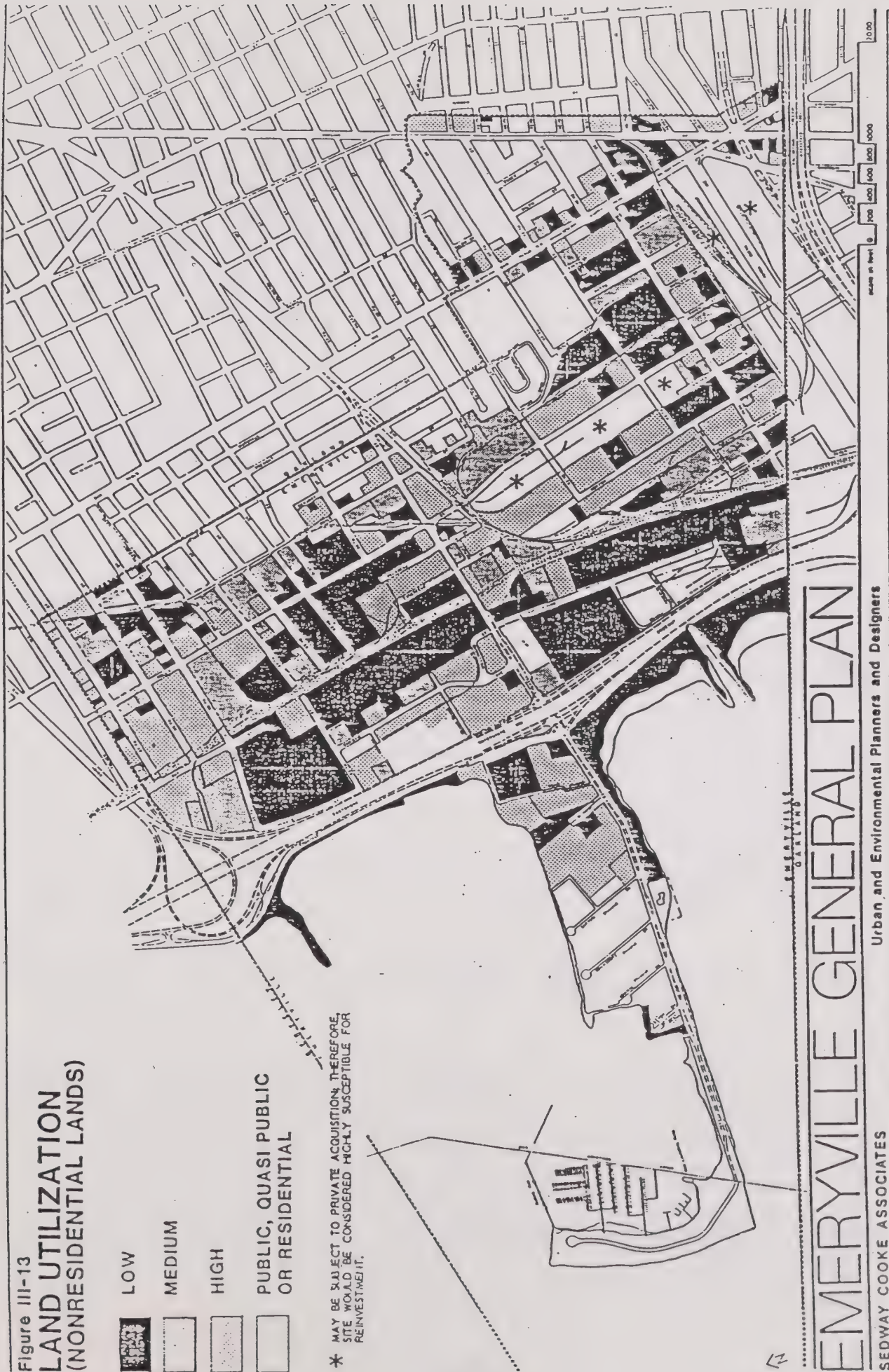
Parcels with ratios greater than 1.40 have generally incurred some form of reinvestment within the last five or so years. Many buildings with ratios between 1.40 and 2.00 have already undergone some rehabilitation which has elevated them from the marginal category. A considerable amount of this activity has begun to occur on

Figure III-13

LAND UTILIZATION (NONRESIDENTIAL LANDS)



* MAY BE SUBJECT TO PRIVATE ACQUISITION; THEREFORE, SITE WOULD BE CONSIDERED HIGHLY SUSCEPTIBLE FOR REINVESTMENT.



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Horton Street from 45th Street north to the railroad tracks. Many of the parcels with ratios in the 2.01-4.00 range are newer buildings built between 1960 and 1970, like the large warehouse facility to the north of Pfizer Chemical. Most parcels with ratios over 4.00 have new buildings on them built in the last ten years. Only in a few instances have older buildings undergone enough rehabilitation to be valued at a ratio of over 4.00. Most notable of these are the buildings occupied by Cetus that were upgraded to incorporate the laboratory requirements of the bio-technology industry. In terms of long-range land use planning, all parcels in the stable category can be expected to remain in their existing physical form if not their current land use.

Land Use Compatibility

Land uses can be complementary as well as conflicting. Conflicts can take a variety of forms and generally occur when different land uses exist in close proximity and where one use infringes on the environmental quality of the other. The major land use conflicts in Emeryville involve visual conflict and noise. There may be additional conflicts, but a visual analysis and land use survey of the entire City indicated that these two are the most serious and pervasive.

Visual Conflicts. Visual conflicts often occur in locations where two adjacent and very different land uses have no buffering or intervening use between them. This type of problem occurs along Doyle Street from Ocean Avenue at the north end to the street's southern end, because it delineates a major transition between residential uses on its east side and industrial uses on its west side. Consequently, many houses face directly onto heavy manufacturing operations. A second area where visual conflicts exist is the commercial strip along San Pablo which abuts a residential area. This strip, which serves a regional market, attracts considerable vehicular traffic that bears no relationship to the residential area behind it. The nature of all strip development is visually unappealing and its automobile orientation, clutter of street signs and lights, and population density are not particularly compatible with a low-density residential neighborhood.

Smaller areas of visual conflict also exist along Adeline Street where commercial and industrial land uses are inappropriately intermixed. Also, the City's entire southeastern tip, including the stretch along the railroad tracks, is a mix of uses where visual conflict and blight are among many physical conditions requiring attention.

Noise. Industrial areas, besides producing negative visual impacts, create other problems, including excessive noise. In Emeryville, which is a small area, there are a number of locations where manufacturing activity noise levels disturb adjacent residential neighborhoods. In addition to the operational noise generated by manufacturing activities, the City's manufacturing, trucking, and wholesaling businesses most often involve intensive trucking activities to transport materials or finished products. Because of the organization of the City's land uses, trucks often must traverse residential neighborhoods to reach their destinations. The noise and safety hazards imposed by this traffic are inappropriate and detrimental to the environmental quality of the City's residential areas. The issue of noise compatibility raised here has significant implications for the distribution of future land uses. A fuller discussion of this concern is presented in the Noise Element of the Public Health and Safety component.

G. COMMUNITY DESIGN

Introduction

Community design is a process of designing an urban setting comprehensively. It concentrates on the overall visual impressions and functioning of the entire City, without dictating the design of individual buildings. While a main function of the Housing and Land Use Elements is to promote better utilization of City assets by designating future densities and particular uses, the function of community design is to unify all elements in a meaningful three-dimensional structure. Community design is expressed primarily through the arrangement of buildings and City spaces. The enjoyment, contentment, and pride of the community springs mainly from these relationships and connections, from the quality of the City spaces, and from the comprehension of the City organization, landmarks, and focal points within it. To make this process viable, community design must influence new construction, preserve distinctive buildings, integrate landscaping in design requirements, and encourage diversity by accommodating and interrelating as many urban functions as possible. In this way the future City will not be a product of piecemeal decisions made around a few individual buildings, but a coordinated organization with the visual and functional interrelationships of spaces and buildings fully considered.

The primary concern of Emeryville's Community Design Element is to shape the City's future physical and spatial form at several levels: regional, City, and site. At the regional level, the City structure is organized to reflect its relation to surrounding communities. At the citywide level, the City's historic spatial organization is preserved and reorganized, where necessary, to serve as the basic pattern for new development. Finally, at the site level, attention is turned toward particular prominent sites which have the role of major activity centers for future development.

Regional Setting

Emeryville is centrally located in the East Bay between Berkeley and Oakland and as such is integrally related to the region's image. As shown in Figure III-16, this part of the East Bay is framed by two dominant natural elements: the hills to the east and the Bay to the west. The majority of the area between these natural features is characterized by low-rise housing areas, accentuated intermittently by landmarks like the Claremont Hotel, Lawrence Hall of Science, and the U.C. Berkeley Campanile. Prominent man-made urban elements of this setting, such as downtown Oakland, the maritime facilities of the Port of Oakland, Emeryville's waterfront development, and downtown Berkeley, are easily recognizable and help to define the region's image.

The City historically has been an integral and cohesive part of the East Bay physical setting. Between the waterfront and San Pablo Avenue, Emeryville's early development pattern blended in form and appearance with the low-rise industrial and housing areas that spread uniformly throughout the East Bay. A gridiron street system, with major streets running from the hills to the Bay (University, Ashby, etc.) and north-south connectors (San Pablo, Telegraph, etc.), provided organization and orientation to the development pattern. This physical setting was dramatically changed by the construction of the freeway system, which physically divided virtually all of the East Bay urban area from its waterfront. The extension of the East Bay waterfront lands into the Bay through landfilling further reduced the historic cohesiveness of the region, because the new lands had no organic, functional tie with the existing physical setting.

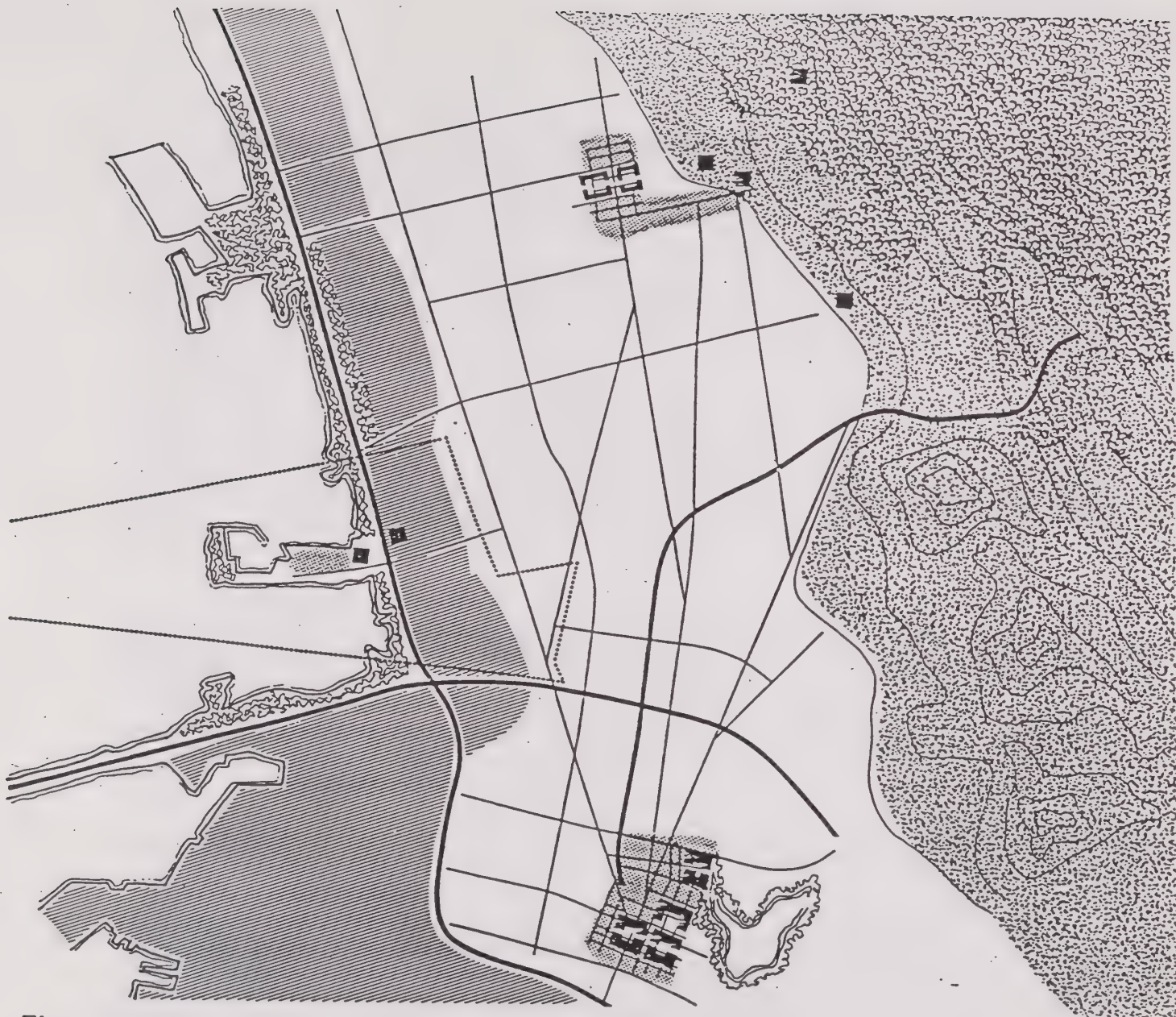
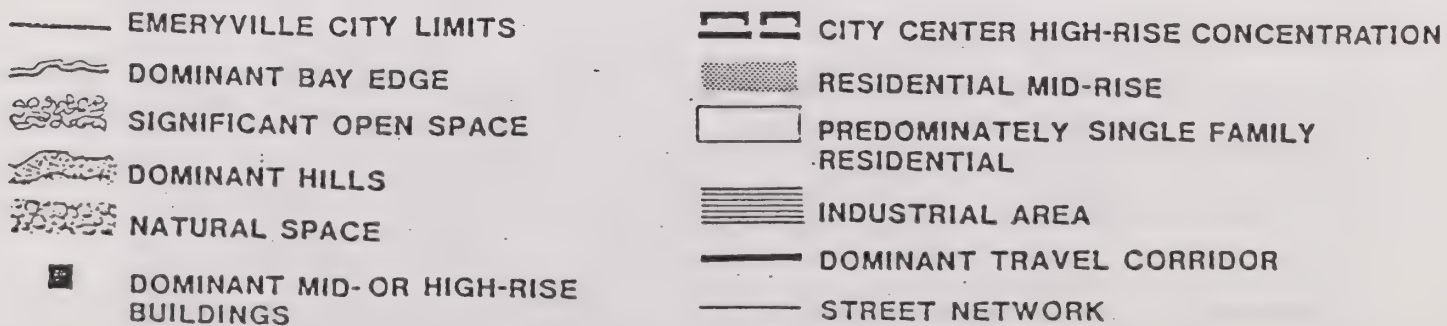


Figure III-16
REGIONAL PHYSICAL SETTING



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The relatively recent development on the Emeryville Peninsula, which has introduced a new building form to the physical setting of the East Bay waterfront, has had two effects. First, the building forms represented a significant break from the predominantly low-rise development pattern of the East Bay. As freestanding towers along the shoreline, these buildings are obvious landmarks from the major travel routes and help provide some orientation, but they are now out of scale and character with the surrounding areas. Second, the scale of the new structures is more representative of a major center than of a small community like Emeryville. The perception one has upon seeing these large-scale projects is that they define a large urban setting. Yet, as one enters the area, it becomes clear that the tall buildings are isolated and unrelated to any of the adjacent uses and activities. Thus, the new development creates an inappropriate image for Emeryville—or at least one that is now premature. In summary, the development decisions that have been made in Emeryville have not only affected the City but they also have begun to reshape the visual setting of the entire East Bay region.

Citywide Organization

Traditionally, Emeryville has been perceived as an industrial city with a small residential area. The primary physical composition of the City was determined by this basic land use pattern and by the gridiron street system. The presence of the railroad lines, and later the freeway, disrupted the street system and posed formidable physical barriers that divided Emeryville into three major subareas: the Peninsula, the Bayfront, and East Emeryville. Today, in each of these subareas, different land uses and physical forms exist that are not related to one another, either visually or functionally. East Emeryville has a rectangular street pattern and low-rise development; the Bayfront lacks an organized street system, and is dominated by large, bulky industrial buildings and open storage spaces; and the Peninsula contains new, virtually unrelated land uses like a marina, multifamily residential structures, and office buildings in a high-intensity, mid- to high-rise building form.

The City's identity is also poorly defined by the lack of clear borders. They roughly follow Ashby Avenue on the north, San Pablo Avenue and Adeline Street on the east, Interstate 580 on the south, and the Bay on the west. There are several key points from which to enter the City by car, but they are poorly defined or confusing, and they do not provide a point of orientation for people coming into Emeryville. Moreover, the only two streets which are continuous throughout the City are Powell and Hollis. Continuity is further impaired in the Bayfront and parts of East Emeryville, where the railroad lines and industrial uses have physically disrupted the traditional, more regular city block pattern. Presently, the most visually prominent features of Emeryville are due to the departure from traditional building heights. New development on the Peninsula and Bayfront encompasses housing and office structures 4-30 stories high. Amidst this contrast of physical scales, there is no sense of community identity. A City center does not exist; the old commercial strip

along San Pablo Avenue is underutilized; and the small shopping area on the Peninsula is inaccessible to most of Emeryville's citizens.

Emeryville's traditional physical structure is changing rapidly, and the City is becoming a collection of spatially disconnected activities. This process may be reversed by taking advantage of two major local resources: the City's size and its location. Emeryville's small size is advantageous because all presently segregated City subareas can be planned and designed as a part of a larger citywide scheme. With major parcels of redevelopable land, there are opportunities to develop a cohesive system of circulation, major land uses, open space, and activity centers. These functions should be organized to take advantage of the City's highly visible and accessible regional location and promote Emeryville as a city which offers a high quality of life.

The major components of community design on a citywide scale are identified below and policies addressing each component follow.

- Building form establishes the City's regional image, visual diversity, and neighborhood identity. This component addresses individual buildings but is most concerned with the image created by a collection of buildings and how they relate to surrounding areas. Important features used to control and influence building form include the height, shape, and size of buildings and the physical dimensions and spacing of city blocks.
- Cityscape defines the character and appearance of main travel routes: the distinction among City streets, blocks, and open spaces; and the connections of the natural environment and public parks to the landscaped City street system, pedestrian routes and public plazas. An important concept in designing a meaningful cityscape is that of continuity. Continuity refers to providing a coherent visual image. For example, a continuous street facade would be characterized by appropriate landscape, buildings that are of similar size and bulk, and blocks that are predominantly occupied by building frontages rather than parking lots, vacant lots, and open storage areas.
- Activity centers serve as focal points within City subareas and unify districts and neighborhoods.

Activity Centers

Activity centers are focal points of high-intensity, people-oriented activities. They are typically found at important points along the City's circulation and open space networks, and provide a connection between different predominantly single-use districts and neighborhoods. Activity centers are generally composed of different mixed-use buildings organized around a public open space that relates to the surrounding uses and helps create a coherent and distinct physical image.

Emeryville's existing public and commercial functions are dispersed throughout the City and isolated from each other. Existing buildings focus primarily on a single use: office towers on the Peninsula and large industrial structures in central Emeryville. Although they fulfill their basic single functions, these concentrations create isolated environments that cannot be combined easily to generate diverse activities.

Zoning may apply to entire districts or to specific sites in the case of special purpose, overlay, or floating zones. Overlay or floating zones could be used to establish design requirements for scenic areas, historic areas (such as around Park Avenue and Horton Street), view corridors, or activity centers.

As an example, conventional zoning or special historic site zoning can be employed to limit uses, signage, parking, building heights, vegetation, and other characteristics to those that will be consistent with the character of the existing landmark or focal point and to limit density, lot coverage, and setbacks to allow for full development without affecting the historic or focal element(s) on the site.

The California Government Code allows preparation of specific plans to regulate site development, including specification of type of use permitted, allowable density, building placement and bulk, areas to remain in open space, and provisions for roadways, utilities, and landscaping. These provisions provide greater flexibility than is possible with conventional zoning, since under the specific plan, conditions are established based on specific site conditions. With these provisions, requirements can be varied from one legal parcel to another to help achieve an attractive, functional development project and one that complements and supports surrounding activities.

H. LANDSCAPE

Introduction

The Role of Landscaping in the Urban Environment. The urban environment is characterized by densely packed buildings, concrete, automobiles, and their attendant dust, noise, wind, and glare. The degree of such conditions has a profound impact on the "liveability" of any city. Landscape amenities, including lighting, signage, street furniture, public art, water features, and large-scale plantings, can help to mitigate these harsh environmental conditions and create a positive community image. Plants, in particular, because they are a natural, living element, can bring a sense of nature into the City. From a design perspective, plantings can help express the character of an area, and visually connect disparate elements. A separate Landscape Element has been provided in this Plan to highlight the special importance of public landscape amenities, and plantings in particular, and establish policies that ensure that priority is given to them in the planning process. This element is closely related to other General Plan elements; namely, Circulation, Public Facilities, Land Use, and Community Design.

Streets and Circulation Routes. Aside from parks and public plazas, which are considered in the Public Facilities, Land Use, and Community Design Elements of this Plan, the City's streets and other circulation routes make up the bulk of the public environment. Public streets are part of the daily life and routine of all residents. Street landscaping, therefore, provides an immediate benefit to a great proportion of the City's population. Street tree plantings can help unite conflicting architectural styles, provide shade and shelter for pedestrians, and give welcome visual relief and reduce glare from expanses of paved surfaces. Mature trees are structural elements in their own right and can be used to define and enclose spaces in the City.

Existing Landscape Character








A survey of Emeryville's streets reveals great disparities between the landscape character of different areas. East Emeryville consists of a mixture of industrial, manufacturing, and older residential development. Although there are intermittent plantings of street trees, the scene is dominated by overhead utility wires, cars, and the visual discordance between buildings of different sizes, shapes, and finishes, with varying heights and setbacks. The Bayfront area, with the exception of the new development along Interstate 80, consists entirely of large-scale industrial and manufacturing uses, and has virtually no landscape amenities. The Peninsula area has extensive landscaping within the Watergate complex and along the Powell Street corridor, but the office and restaurant area near the freeway is characterized by huge parking lots, a lack of trees, and an environment generally unfavorable to pedestrians. In general, throughout the City, new developments are well-landscaped, but are anomalies within the greater context, surrounded on all sides by a relatively barren landscape. Sidewalks in industrial areas are very narrow or entirely absent. The City's scattered commercial areas are sorely lacking in landscape amenities. The intermittent trees on San Pablo Avenue are often neglected and are so small in relation to the width of the street and the intensity of the traffic that they have minimal effect.

The present pattern of intermittent, uncoordinated street landscaping is largely the result of piecemeal private development and the efforts of individual landowners. In order for the City to create an integrated street landscape system, it must address the problem at a level higher than that of the individual property or development project.

Commercial Streets: San Pablo/Powell Corridors. These streets, which are the major vehicular thoroughfares as well as commercial strips, are important in presenting the public image of the City to residents as well as motorists passing through. With landscape amenities, these streets could become attractive to pedestrians. Because of the width of the streets and number of traffic lanes, a planted median strip, including both trees and shrubs, is desirable. The trees in the median should provide some seasonal display, such as spring flowering or fall color. Sidewalk trees, located in tree wells and in raised beds containing shrubs or flowering ground cover, should be evergreen and of a height and spread in scale with the width of the street. Street tree planting should be part of an overall street re-design to facilitate parking and drop-offs, create seating areas, and improve signage and lighting. Special paving treatments, planters, trash containers, lighting fixtures, and benches would be appropriate for these areas. An illustration of the landscape concept for this area is found in Figure III-25.

Pedestrian and Bicycle Corridors. Pedestrian and bicycle paths, located on abandoned rights-of-way or created in new developments, will form a circulation network linking the City's major open spaces and activity centers. These are essentially linear parks, containing paved plaza spaces at street intersections, paved or unpaved pathways, tot lots or other formal recreational facilities, seating areas, informal recreation areas, and formal or informal plantings. Large spaces, 60-120 feet wide, can accommodate informal lawn areas for recreation and picnicking, alternating with woody or flowering ground cover to minimize watering needs. Narrower spaces, up to 60 feet wide, will have a more formal design, with paved pathways and seating alcoves. An illustration of this type of corridor is shown in Figure III-26. Large trees, tall evergreens of a columnar or a spreading habit, should be used to emphasize the linear form of the corridors. Smaller trees and woody shrubs and ground cover with seasonal color and annual flowering displays will accent the background structure of the large evergreen trees. Areas bordering Temescal Creek should be planted with native riparian species.








TABLE III-22: RECOMMENDED TREE SPECIES FOR LANDSCAPE CORRIDORS (cont.)

Botanical Name, Common Name	Features/Problems	Height/ Spread	Texture	Growth Habit	Corridor Types
 <i>Acer macrophyllum</i> Big leaf maple	DEC, fall color, flowers, Ca. native, riparian, needs moisture	30'-100'/ 30-50'	coarse	variable, spreading	2
 <i>Albizia julibrissin</i> Silk Tree	DEC, flowers, specimen litter, d.t.	25'-40'/ 35'	Fine	Spreading	2,3,6
 <i>Alnus rhombifolia</i> White alder	DEC, Ca. native, riparian, needs moisture	40-100'/ 40'	Medium	Spreading- Upright	2
 <i>Brachychiton populneum</i> Bottle tree	BLE, d.t., litter	30'-50'/ 30''	Medium- Coarse	Upright	1,2,3
 <i>Callistemon viminalis</i> Weeping Bottle brush	BLE, red flowers, d.t.	20-30'	Fine	Upright, Weeping	4
 <i>Catalpa speciosa</i>	DEC, flowers, fast growth, tropical effect, messy	40'-60'/ 30'-40'	Coarse	Upright	3
 <i>Ceratonia siliqua</i> Carob	BLE, nice foliage, needs good drainage	30'-40'/ same	Medium	Compact, Spreading	1

KEY: BLE: Broad-leaf Evergreen DEC: Deciduous d.t.: drought tolerant

Landscape Corridor Types: 1. Commercial Streets 2. Pedestrian and Bikeways 3. City Boulevards
4. Industrial Streets 5. Residential Buffers 6. Other

TABLE III-22: RECOMMENDED TREE SPECIES FOR LANDSCAPE CORRIDORS (cont.)

Botanical Name, Common Name	Features/Problems	Height/ Spread	Texture	Growth Habit	Corridor Types
 <i>Cinnamomum camphora</i> Camphor tree	BLE, foliage color, casts deep shade	large	Medium	Upright, Spreading	1,4,5
 <i>Ficus nitida</i> Indian laurel	BLE, clean, neat, mod.-fast growth		Medium	Upright, Compact	4
 <i>Fraxinus velutina</i> "Modesto" Modesto ash	DEC, fall color, shade, pests, fungus	30'-50'/ 30'	Medium	Spreading	2,6
 <i>Ginkgo biloba</i> Maidenhair tree	DEC, fall color, likes heat, use male forms only	30-50'+	Medium	Upright, Spreading	2,6
 <i>Geijera parviflora</i> Australian willow	BLE, neat, pest-free, d.t.	20-30'/ 20'	Fine	Compact, spreading	1,4
 <i>Grevillea robusta</i> Silk oak	BLE, fern-like leaves, rapid growth	50-60'/ 25'	Fine- Medium	Upright- Narrow	1
 <i>Hoheria populnea</i> New Zealand Lace Bark	BLE, flowers, graceful, d.t.	50'-60'	Medium		2







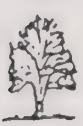
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Landscape Corridor Types: 1. Commercial Streets
4. Industrial Streets2. Pedestrian and Bikeways
5. Residential Buffers3. City Boulevards
6. Other

TABLE III-22: RECOMMENDED TREE SPECIES FOR LANDSCAPE CORRIDORS

Botanical Name, Common Name	Features/Problems	Height/ Spread	Texture	Growth Habit	Corridor Types
 <i>Laurus nobilis</i> Laurel	BLE, formal, slow growth, needs good drainage	12'-40'	Medium- Coarse	Upright, Compact	4
 <i>Leptospermum laevigatum</i> Australian tea tree	BLE, flowers, seaside cond., d.t., needs gd. drainage	30'	Fine	Spreading	3
 <i>Liquidambar styraciflua</i> American sweet gum	DEC., scarlet fall color resembles maple	60-70'/ 30-40'	Medium- Coarse	Upright- Narrow	5
 <i>Lyonothamnus floribundus</i> 'Asplenifolius' Ironwood	BLE, Ca. native, d.t. seaside conditions	25'-60'/ 20'-40'	Fine		2
 <i>Malus</i> spp. Crabapple	DEC., flowers specimen	25'-30'	Medium	Spreading	2,3
 <i>Magnolia grandiflora</i> Southern magnolia	BLE, flowers, slow to establish	30'	Coarse	Upright- Spreading	2,3
 <i>Paulownia tomentosa</i> Empress tree	DEC, flowers, fragrance, tropical effect, litter	40'/30'	Coarse	Upright Spreading	3

KEY:







BLE: Broad-leaf Evergreen

DEC: Deciduous

d.t.: drought tolerant

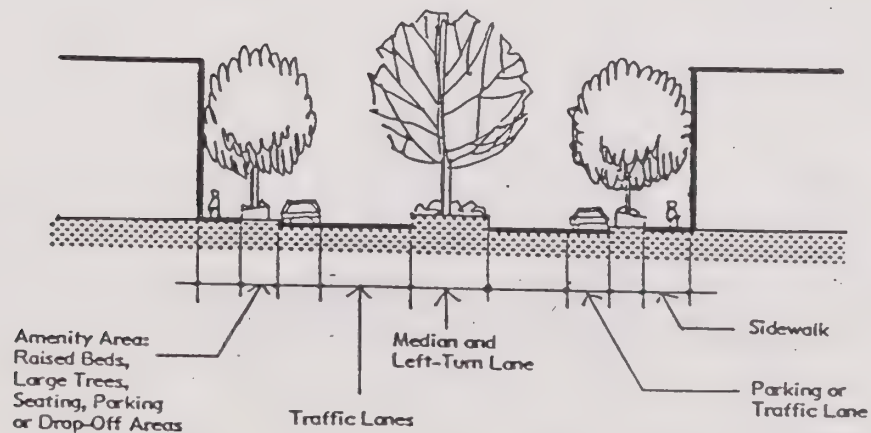
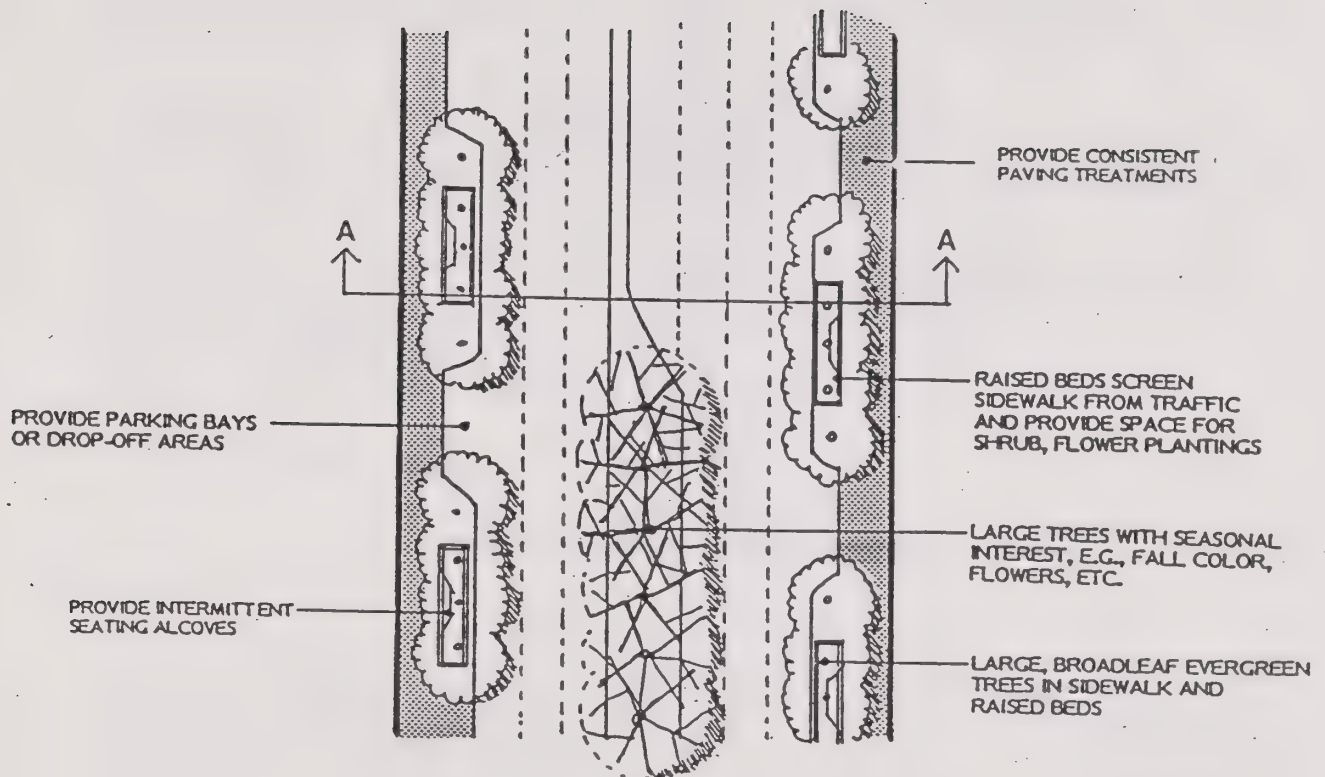
Landscape Corridor Types: 1. Commercial Streets
4. Industrial Streets2. Pedestrian and Bikeways
5. Residential Buffers3. City Boulevards
6. Other

TABLE III-22: RECOMMENDED TREE SPECIES FOR LANDSCAPE CORRIDORS (cont.)

Botanical Name, Common Name	Features/Problems	Height/ Spread	Texture	Growth Habit	Corridor Types
 <i>Pistacia chinensis</i> Chinese pistache	DEC, fall color, shade, d.t., pest-free	30-50'/ same	Medium	Spreading	1,2,5,6
 <i>Prunus serrulata</i> Japanese flowering cherry	DEC, flowers	20-25'/ 10'-20'	Medium	Spreading	1,2,5,6
 <i>Schinus terebinthifolius</i> Brazilian pepper	BLE, fruit (red berries), d.t.	15'-30'	Medium- Coarse	Upright, Spreading	1,4,5
 <i>Tristania conferta</i> Brisbane box	BLE, bark, flowers, fast-growing	30-60'	Coarse	Upright	1
 <i>Washingtonia robusta</i> Fan palm	Palm, dramatic accent, tropical effects	80-100'/ 12'	Fine- Medium	Upright	3
 <i>Zelkova serrata</i> Zelkova	DEC, fall color, pest-free	50-60'/ 30-40'	Medium- Fine	Upright- Vase Shaped	1

KEY: BLE: Broad-leaf Evergreen DEC: Deciduous d.t.: drought tolerant

Landscape Corridor Types: 1. Commercial Streets 2. Pedestrian and Bikeways 3. City Boulevards
4. Industrial Streets 5. Residential Buffers 6. Other



SECTION A-A

Figure III-25
TYPICAL LANDSCAPE TREATMENT:
COMMERCIAL STREETS

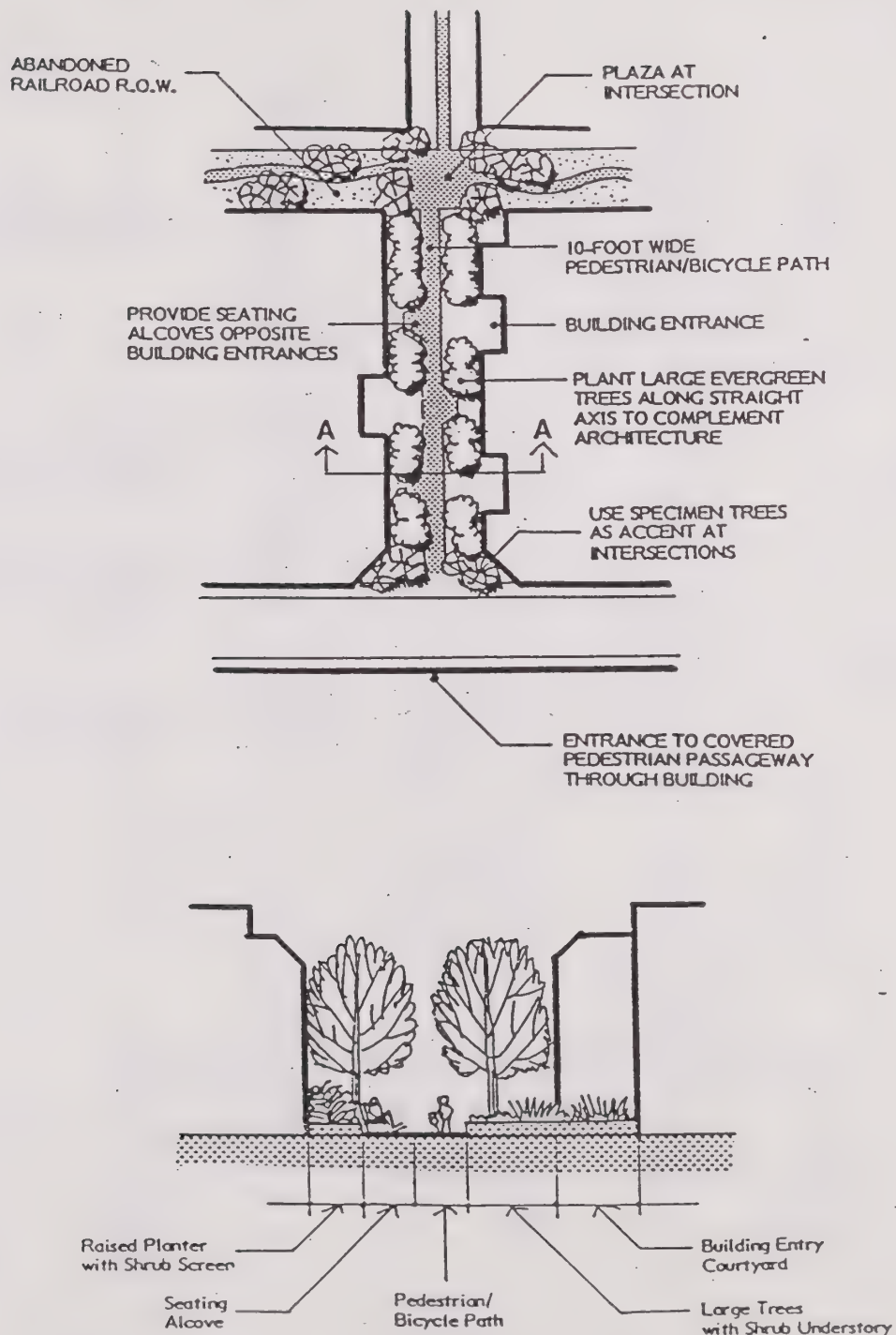


Figure III-26
**TYPICAL LANDSCAPE TREATMENT:
 NARROW PEDESTRIAN/BIKEWAY**

City Boulevards: Yerba Buena, Bay, Powell on the Peninsula. These wide streets are major vehicular thoroughfares where virtually all uses are automobile-oriented. These streets should have a suburban landscape character, with the planting serving primarily an ornamental function, being viewed from moving cars. Generous-sized areas should be set aside for median and sidewalk planting strips containing large-textured, fast-growing plants with showy effects. Since the planting strips are not likely to be used for foot traffic or recreation, the use of turf grasses should be minimized to conserve water and reduce maintenance. Other landscape amenities of importance in these areas are signage and lighting.

Industrial Streets: Hollis, Park, Horton. The land uses along these streets are predominantly industrial and manufacturing. The rights-of-way tend to be narrow, with narrow sidewalks, and are lined with functional warehouse-type buildings, some of a historic character. The buildings frequently are set back very little from the property line, restricting the space available for landscaping. To honor the utilitarian character of these areas, the landscape design should be very simple, consisting of formal evergreen street trees of a narrow, compact growth habit, which will complement the architecture, and allow it to remain the dominant feature.

recreation and picnicking, alternating with woody or flowering ground cover to minimize watering needs. Narrower spaces, up to 60 feet wide, will have a more formal design, with paved pathways and seating alcoves. An illustration of this type of corridor is shown in Figure III-26. Large trees, tall evergreens of a columnar or a spreading habit, should be used to emphasize the linear form of the corridors. Smaller trees and woody shrubs and ground cover with seasonal color and annual flowering displays will accent the background structure of the large evergreen trees. Areas bordering Temescal Creek should be planted with native riparian species.

City Boulevards: Yerba Buena, Bay, Powell on the Peninsula. These wide streets are major vehicular thoroughfares where virtually all uses are automobile-oriented. These streets should have a suburban landscape character, with the planting serving primarily an ornamental function, being viewed from moving cars. Generous-sized areas should be set aside for median and sidewalk planting strips containing large-textured, fast-growing plants with showy effects. Since the planting strips are not likely to be used for foot traffic or recreation, the use of turf grasses should be minimized to conserve water and reduce maintenance. Other landscape amenities of importance in these areas are signage and lighting.

Industrial Streets: Hollis, Park, Horton. The land uses along these streets are predominantly industrial and manufacturing. The rights-of-way tend to be narrow, with narrow sidewalks, and are lined with functional warehouse-type buildings, some of a historic character. The buildings frequently are set back very little from the property line, restricting the space available for landscaping. To honor the utilitarian character of these areas, the landscape design should be very simple, consisting of formal evergreen street trees of a narrow, compact growth habit, which will complement the architecture, and allow it to remain the dominant feature.

Residential/Buffers: Doyle, Adeline, 47th Street in the Triangle. This type of corridor typically occurs where residential uses abut with commercial, warehouse, or mixed uses, or within residential areas separated by wide streets. Where residential and non-residential uses are on opposite sides of the same street, landscaping should serve to visually unite the two sides of the street, and to some extent, to screen the commercial/warehouse buildings from the residential uses. Sidewalks should contain a planting strip for street trees and ground cover. Commercial buildings should have a planted setback or foundation planting if space allows. Street trees should be medium size, with a strong form and possibly seasonal effects.

Other. This category covers the remaining local streets not identified above. Landscaping on these streets would be desirable primarily to provide an aesthetically pleasing atmosphere. Street trees should be medium size, fan-shaped, and deciduous.

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Other. This category covers the remaining local streets not identified above. Landscaping on these streets would be desirable primarily to provide an aesthetically pleasing atmosphere. Street trees should be medium size, fan-shaped, and deciduous.

Initial investment, maintenance, and replacement costs can be significantly reduced through the choice of appropriate species and the design of irrigation systems. Examples of appropriate species are native California plants or plants native to regions climatically similar to northern coastal California which require less water and are more pest- and disease-free than many commonly used ornamental plants. Minimizing lawn turf areas, which typically consume 70% of landscape water requirements, and using drought-tolerant ground cover or turf species requiring little water will reduce maintenance costs. Use of smaller-sized nursery stock in initial installation, except in areas where an immediate effect is desired, is generally recommended. Studies have shown that the size of plants after five years is the same for 1-gallon plants as for 15-gallon, and the smaller plants are stronger and more drought-tolerant

¹Saratoga Horticultural Foundation, Success List of Water-Conserving Plants, September 1982.

because they are able to form a deeper root system than the larger plants. Needless to say, the smaller container stock is less costly than the larger stock.¹

The typical urban street is a difficult environment for plants to survive in because of reduced air quality, soil compaction and limited root area, damage from vehicles, foot traffic, pests and diseases, wind tunnel effects, and a host of other problems. With adequate commitment of public resources, these problems can be surmounted through provision of adequate space for plantings, proper species selection, and installation and regular maintenance of plantings. It is essential to the success of any City landscaping program that an adequate commitment of resources be made for ongoing maintenance. Without proper maintenance of plant materials, especially in the critical first five years of growth, the funds spent for installation are wasted. Badly maintained, weedy, or dead landscape plantings are a demoralizing sight, and actually may be worse for a City's image than no landscaping at all.

¹Ibid.

CHAPTER IV: ENVIRONMENTAL RESOURCES

A. INTRODUCTION

Natural resources represent ecological and economic benefits to the City as well as valuable recreational and scenic amenities. State law requires cities and counties to identify natural resources and to prepare and implement policies guiding their management. The legislative requirements, outlined in the Government Code, include:

- Section 65302(d) which requires the preparation of a conservation element to guide the conservation, development, and utilization of natural resources.
- Sections 65560, et seq., which require the preparation of an open space element specifying open space land for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety.

Open space and natural resources are not merely undeveloped land or leftover spots of vacant lands. Instead, they play a vital part in the organization and identity of the community. These resources can help to create a high-quality environment, which stimulates the economic and social health of the community.

Accordingly, the Environmental Resources component of the Emeryville General Plan identifies lands of ecological value, specifies policies for the protection of plant and animal life, and outlines measures for appropriate use and protection of resources which are expended or affected by human activity. The elements in this component include:

- Water Resources;
- Biological Resources;
- Air Quality;
- Energy; and
- Cultural and Historic Resources.

Open space falls into two very general categories: ecological preserves, and active or passive outdoor recreation. The first type of open space can protect the habitat of an endangered species or provide scenic beauty. Its size and location is dictated by the natural factors which define it. The second type can be provided in several different locations, and its size requirements are flexible. Because the primary open space opportunities in Emeryville exist along the Bay shoreline, the General Plan presents open space issues within the Water Resources, Biological Resources, and Public Facilities Elements.

The ultimate intent of the Environmental Resources component is not to prohibit the development or use of natural and cultural resource areas; rather it is to increase access where this access will not destroy the natural or cultural value of an area, and to encourage public education and participation in the protection of natural or cultural resources. In some cases, protection does necessitate development restrictions.

The policies and discussion within the Environmental Resources component must be considered in conjunction with those of other General Plan components and elements, particularly those of land use, environmental hazards, and community design. Land uses and community design are in many cases governed by environmental resources. The need to protect biological resources, for example, will call for restrictions in land use. Conversely, many natural resources, such as open space, can define the community and will be utilized as a key to the City's recreation and community design opportunities. In some cases, natural resource areas also serve public safety purposes. A natural preserve may be designated in a flood or seismic hazard area, for example. Thus, the policies of the elements in the Environmental Resources component overlap with the rest of the General Plan.

B. WATER RESOURCES

Introduction

There are three major water resources in Emeryville: San Francisco Bay; Temescal Creek, which flows through the southern portion of the City and empties into the Bay; and ground water. Drinking water is supplied by the East Bay Municipal Utility District (EBMUD) from a reservoir in the East Bay hills. Although the supply of adequate drinking water is not presently a constraint to future growth, and the quality of the City's water resources does not directly affect water for drinking, water conservation and water quality¹ are important issues, on both a local and a regional basis.

Water Bodies

San Francisco Bay. Because of the importance of the San Francisco Bay as an environmental, economic, recreational, and visual resource, protection of its water quality is of critical concern to all jurisdictions along the shoreline. Water quality management efforts are described in the San Francisco Bay Water Quality Control Plan (1982) administered by the Regional Water Quality Control Board (RWQCB). The RWQCB has the authority to penalize dischargers who violate water quality standards. Several other agencies are concerned with the use and protection of San Francisco Bay. The San Francisco Bay Conservation and Development Commission (BCDC) was established in 1965 under provisions of the McAteer-Petris Act passed by the Legislature in 1965. This act charged BCDC with the responsibility for developing "a comprehensive and enforceable plan for the conservation of the water of San Francisco Bay and the development of its shoreline." Both the San Francisco Bay Plan (1983) and the RWQCB San Francisco Bay Water Quality Control Plan recognize the recreation and conservation opportunities provided by the Bay and its shoreline.

The southern portion of the Bay shoreline in Emeryville is comprised of a regionally important salt marsh, the Emeryville Crescent. Salt marshes are critical to the entire Bay ecology: not only do they help to improve the quality of the water, but

¹ Wastewater treatment is discussed in the Public Facilities Element.

they support a diverse wildlife population. Although most of the Emeryville Crescent actually falls within the borders of the City of Oakland, the portion which is within Emeryville is no less important to the overall functioning of the salt marsh and Bay ecosystem. This portion of the Bay is affected by several drainage outlets: a storm sewer outfall south of the Peninsula, a wastewater treatment outfall in the southern portion of the Crescent in Oakland, and Temescal Creek. Ground water also migrates into the Bay; however, because this water moves very slowly, its effects on the Bay and salt marsh are less apparent and, to a certain extent, less significant than the drainage outlets at the edge of the Bay.

Both the BCDC and the U.S. Army Corps of Engineers (COE) issue permits for any filling activities on the Bay. The COE also administers and implements many shore erosion control projects, such as the riprap on the Bay shoreline. Riprap has been necessary along the deeper waters adjacent to Emeryville's Peninsula in order to check erosion; it was replaced in 1986.

Temescal Creek. Temescal Creek is a channelized creek draining Lake Temescal in the Oakland foothills. It is dry most of the year and runs underground through portions of Emeryville. The concrete lining keeps the creek free from erosion and sedimentation problems; however, there are indications that the creek may be polluted from urban sources. This does not currently represent a threat to public safety because the creek is highly inaccessible. Should the creek be reconfigured as an open waterway, as currently proposed, human contact with the water could increase.

Ground Water. Water which exists below the surface of the ground, in the openings of soil and rocks, is called subsurface or ground water. The upper limit of this saturated zone is called the water table. In Emeryville, the water table is relatively high, occurring only several feet below the surface of the ground in places. Because this water migrates slowly toward the Bay, the quality of the water ultimately could affect the Bay ecosystem. Pollutants which have recently been detected in the Bay have not been traced to ground water sources. Because the movement of the water is slow, it is not seen as an immediate threat; nevertheless, maintenance of ground water quality should not be overlooked as an important water resource issue.

Water Pollution

Two sources of water pollution can threaten the quality of the water: point sources and non-point sources. Point sources are dischargers that dispose of their wastewater, or effluent, from a single point, such as a wastewater treatment plant outfall. Effluent from these sources is relatively simple to control by applying treatment processes "at the end of the pipe." In contrast, non-point sources are described as diffuse, areawide sources, such as construction sites and roadways. These sources often are not amenable to structural solutions and typically require land management or non-structural source controls.

In the Emeryville vicinity, where the land is virtually all urbanized, urban stormwater runoff is a major source of non-point water pollution. Pollutants such as suspended solids, heavy metals, and nutrients are often found in samples of urban stormwater runoff. These pollutants are typically deposited onto street surfaces and washed into receiving waters during the initial phases of a storm. This "first flush effect" can create a serious oxygen depletion in the vicinity of the discharge and result in serious diminution of the water's ability to assimilate waste loads. The

Association of Bay Area Governments (ABAG) has estimated the amount of suspended solids in the Bay Area from stormwater runoff to be an order of magnitude greater than from various point sources around the Bay.¹ A direct example of the problems associated with stormwater runoff is the contamination of shellfish harvesting areas near East Bay creeks and storm drains.² ABAG, through its Environmental Management Plan, has recommended several measures to alleviate non-point sources of water pollution. These measures deal primarily with erosion control for construction sites and control of oil and grease from roadways and parking lots.

Discharges from point sources are regulated by the RWQCB, which issues effluent standards as well as permits stipulating the conditions and water quality standards that must be met by certain municipal and industrial dischargers. The effect of RWQCB standards and regulations has been to greatly reduce the pollutant loading from these sources. None of the industries in Emeryville are considered major dischargers, as most discharge only small amounts of cooling water and/or runoff. Nevertheless, water quality protection efforts must be continued, as some past and present industrial activities have contributed to ground water contamination.

The East Bay Regional Parks District (EBRPD) conducted studies of Lake Temescal and its tributaries several years ago to determine pollutant levels. The studies uncovered a high level of bacteria in the creeks and determined that much of it could be attributed to wild and domestic animals. Although no studies were conducted on Temescal Creek below the lake, it is possible that the watercourse is similarly high in bacteria where it flows through Emeryville.³ The RWQCB has made no measurements of the water quality of Temescal Creek.

The Alameda County Flood Control and Water Conservation District maintains monitoring stations in the East Bay streams. During the period from 1975 to 1977, several tests were conducted on water drawn from monitoring stations along Temescal Creek just outside of Emeryville in Oakland. At that time, coliform levels in the creek were high.⁴

A sewer improvement program (East Bay Infiltration/Inflow Correction Program) has been initiated by EBMUD to eliminate wet weather overflows of raw sewage to community streets, creeks, and the Bay. Besides being a public health threat, these overflows are in violation of State and Federal law. The project involves rehabilitation of publicly owned sewer mains, construction of relief sewers to increase capacity during wet weather, and rehabilitation of privately owned building laterals.

¹California Regional Water Quality Control Board, San Francisco Bay Region Water Quality Control Plan: San Francisco Bay Basin, July 1982, pp. 4-36.

²California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 8.

³Pete Alexander, Water Resources Division, East Bay Regional Parks District, October 8, 1985.

⁴Kelvin Hickenbottom, Water Resources Engineer, Alameda County Flood Control and Water Conservation District, September 29, 1985; Surface Water Quality Monitoring Station data for Temescal Creek.

The RWQCB sometimes coordinates with the State Department of Health Services (DOHS) in the investigation and cleanup of site contamination due to inappropriate storage, handling, treatment, or disposal practices associated with toxic wastes and hazardous materials. The RWQCB is also responsible for monitoring industrial sites for possible leakage of hazardous materials. Activity in this area has increased due to increased information and a greater awareness on the parts of companies and individuals.

Despite this activity, however, some contamination of ground water has occurred. At the Electro-Coatings property on Park Avenue, heavy metals and volatile organics have been identified in the ground water. The RWQCB currently is attempting to assess the extent of the contamination before cleanup efforts can begin. No other ground water sites are known to be contaminated; however, soils contamination, identified at several other sites, represents a potential threat. Runoff from uncovered contaminated soil can enter storm drains, eventually reaching the Bay; and water can percolate through the soils, picking up some of the contaminants and transporting them to the ground water. Studies were conducted for some trace metals in clams in the mudflats of the Emeryville Crescent. These studies concluded that levels of silver, copper, and zinc were not high. Manganese, a non-toxic element, was found at exceptionally high levels. Manganese changes to a soluble form when no oxygen is present, and it will travel with water. It is possible that the manganese originated from industrial activities east of the railroad tracks, where traces of heavy metals have been found in the ground water. The presence of manganese could indicate the presence of these toxic metals, although no studies have been conducted to confirm or deny this possibility.¹ The contaminated sites, which include Westinghouse on Powell Street; ITT Grinnell, Chevron, and PG&E on Hollis Street; and Garrett Truck Lines and the Emeryville Marketplace in the Bayfront, are discussed in further detail in the Hazardous Materials Element (in the Public Health and Safety component).

Water

conservation techniques appropriate for new and existing development include:

- requiring low-flush toilets;
- installing shower head flow restrictors;
- repairing leaky fixtures and pipes; and
- promoting drought-resistant vegetation for landscaping uses.

¹Sam Luoma, Regional Research Hydrologist, U.S. Geological Survey, October 3, 1985.

C. BIOLOGICAL RESOURCES

Introduction

Emeryville is almost entirely urbanized and no known wildlife or important plant communities exist east of the freeway. West of the freeway, in the area south of Powell Street commonly known as Emeryville Crescent, shorebirds and marine life thrive in the tidal salt marsh. The resources of the Crescent, described below, are depicted in Figure IV-1.

This element is closely related to several other General Plan elements. The health of the Emeryville Crescent is directly related to the condition and quality of the water in the Bay and the water which flows into it; that is, from Temescal Creek, the storm drain outfall north of it, and the wastewater treatment plant outfall to the south. Biological resources often represent valuable open space and recreational areas. Thus, issues in the Biological Resources Element correspond to some issues raised in the Water Quality and Public Facilities Elements.

Emeryville Crescent

The Emeryville Crescent is an important biological community and one of the few salt marshes still in existence in the San Francisco Bay. Almost 80% of East Bay

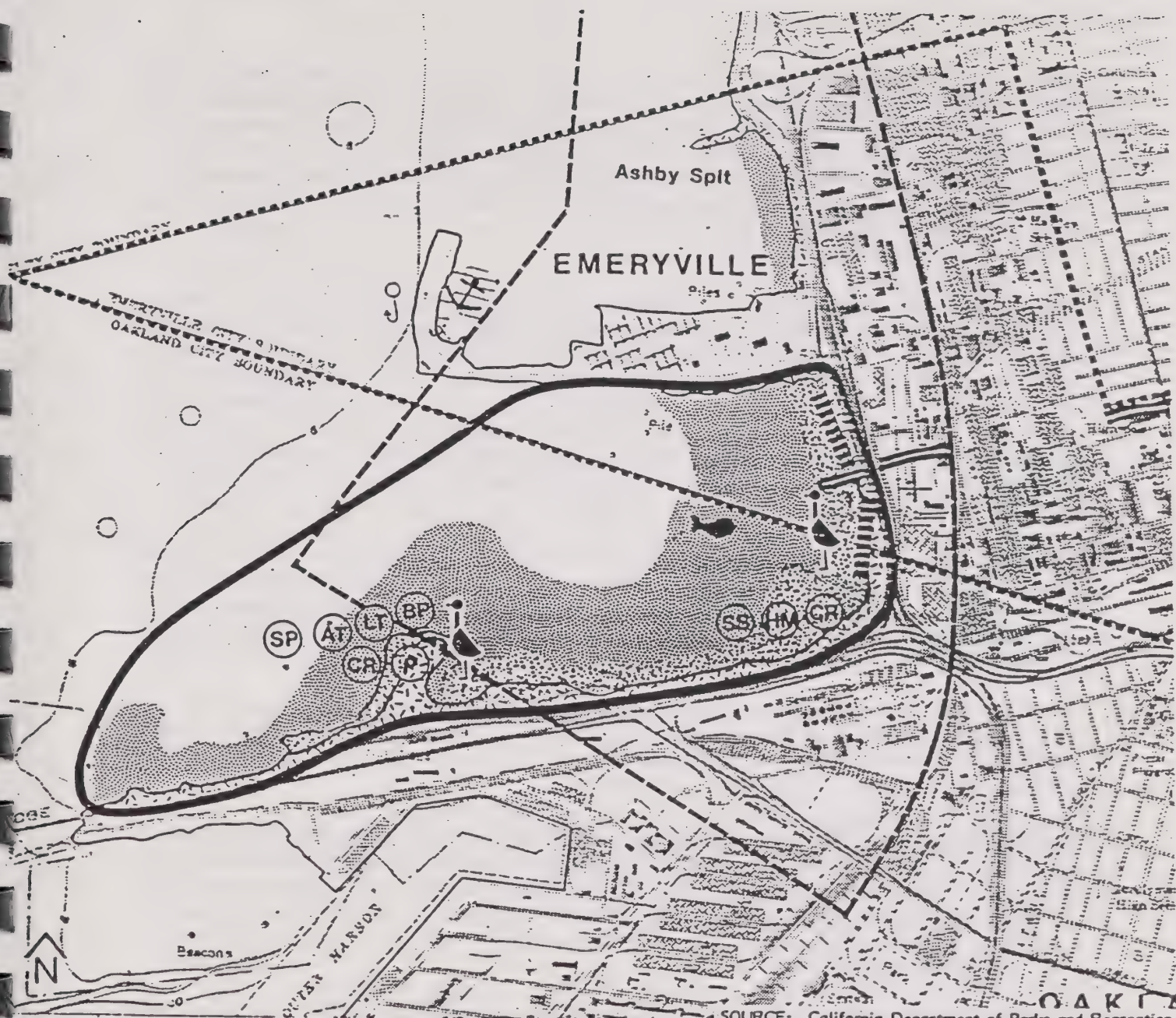


Figure IV-1
NATURAL RESOURCES

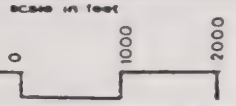
SOURCE: California Department of Parks and Recreation, East Bay Shoreline Feasibility Study, December 1982; California State Lands Commission, Public Trust Rights and Needs in the Albany Baylands, October 1982; Bodega Bay Institute, The Crescent, January 1978.

	Emeryville Crescent-High Value Wildlife Habitat		Upland		Species of Concern: RARE PLANT
	Waterbird Habitat		Temescal Creek		CALIFORNIA CLAPPER RAIL
	Striped Bass Spawning Area		Marina		SALT MARSH HARVEST MOUSE
	Mud Flat		Fishing		CALIFORNIA LEAST TERN
	Marsh		Sculpture Area		CALIFORNIA BROWN PELICAN
			BTLC "Property" Sold		ALAMEDA SALT MARSH SONG SPARROW
					SNOWY PLOVER
					ARCTIC TERN

EMERYVILLE GENERAL PLAN

SEDWAY COOKE ASSOCIATES

Urban and Environmental Planners and Designers



marshes have been destroyed or removed from tidal action by diking or filling.¹ These salt marshes are essential to the Bay ecosystem because they oxygenate the water, an activity which is essential for the support of marine life. Creatures that live in the mudflats convert the organic matter found in the mud into food for fish, crabs, and birds.² The vegetation provides habitat for a number of small animals and birds, and an important feeding and resting area for migratory birds. Although most of the Crescent lies within Oakland, the portion which is within Emeryville is an essential part of the salt marsh ecosystem.

Most people who have driven Interstate 80 approaching the San Francisco-Oakland Bay Bridge through Emeryville have noticed the driftwood sculptures in the tidal marsh. Students from the California College of Arts and Crafts in Oakland erected the first mudflat sculptures in the early 1960s, using driftwood and whatever else had washed ashore. They were studying the work of Kurt Schwitters, a German artist known for his sculptures created from "odds and ends of commerce."³ Since then, people have been using the Crescent as a canvas for their driftwood art, and the "sculpture garden" has attracted people who have used it for recreation and sightseeing.

Initially, the sculptors only used natural materials and the thrust of the work was merely artistic. Since the late 1960s, some driftwood sculptors have used the mudflats as a political forum, importing materials to create the sculptures when necessary. Popular literature documented these activities, and the sculpture garden became the "People's Art Gallery," enjoying great local fame.⁴

Construction of the sculptures has severely damaged the salt marsh environment. A study revealed that human activity in the salt marsh damages the vegetation, which destroys wildlife habitat. Natural recovery of the marsh, if human activity were to be curtailed completely, could take 50 years.⁵

Federal and State law protects plant and animal species which are at risk of becoming extinct. Both the Federal and State systems classify a species according to its numbers. The Federal system assigns a legal rank to endangered species, classifying them as endangered, threatened, proposed for endangered or threatened status, and

¹California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 10.

²California Regional Water Quality Control Board, Water Quality Control Plan: San Francisco Bay Basin (2), July 21, 1982, pp. 2-8.

³California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 14; Lisa Cohen, "Emeryville Crescent: The Sculpture Garden Controversy," in The East Bay Shoreline: Selected Environmental Issues, June 1982, p. 166.

⁴Lisa Cohen, "Emeryville Crescent: The Sculpture Garden Controversy," in The East Bay Shoreline: Selected Environmental Issues, June 1982, pp. 166-167.

⁵James K. Doyle, "Characteristics of Trampled Marsh Soil and Potential for Rehabilitation," in The East Bay Shoreline: Selected Environmental Issues, June 1982, pp. 155-162.

candidates for endangered or threatened status. In California, species are classified as endangered or rare. A species is considered "endangered" when the prospects of its survival and reproduction are in immediate jeopardy. It is "rare" when, although it is not presently threatened with extinction, it is found in such small numbers that it may become endangered if its environment worsens.¹ "Species of concern" are those which are found in relatively small numbers but which are not considered rare or endangered.

Preservation of the salt marsh community is a priority among local interests, as well as among regional, State, and Federal agencies. Within its boundaries, the Emeryville Crescent harbors a number of Federal- and State-listed rare and endangered animals. Many of these creatures depend upon the Emeryville Crescent as their sole habitat and would be seriously affected by further destruction of the salt marsh environment.

As shown in Figure IV-1, most regular inhabitants of the Crescent are found south of Temescal Creek where human intrusion is rare. Clearly, public access was not originally appropriate in this fragile environment. Yet many are still unaware of the potential impact, and public access has become a controversial issue. Public agencies with overlapping jurisdictions are divided on what type of access would be appropriate. Agencies responsible for developing public recreation and increasing access to the Bay tend to emphasize the recreational opportunities of the Emeryville Crescent. Those charged with protecting wildlife tend to cite the damage already caused by unauthorized public access and recreation, arguing against increased public access.

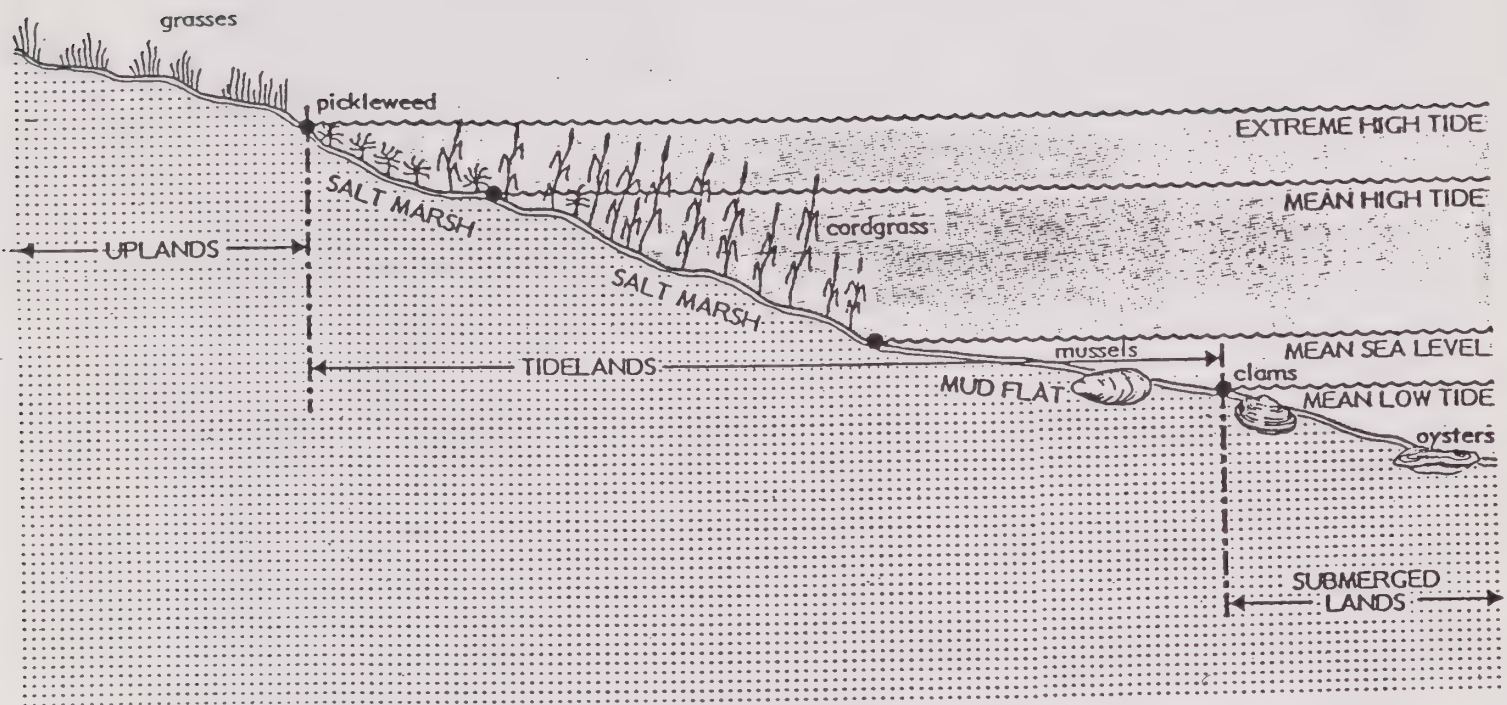
Plants and Animals

Plants. Salt marsh vegetation grows in zones which correspond to tidal elevation and frequency of salt water inundation, as shown in Figure IV-2. The vegetation which grows in each zone is related to the tolerance of the species to salt water. Most of the Crescent consists of mudflats, which are submerged except at low tide and slope gently upward toward the marshy shore. Just above this elevation, where salt water inundation occurs at high tide, typical salt marsh plant species can be found (see Table IV-1).²

The tidal zone grades abruptly into an "upland zone" above the high water line. Plants in the upland zone experience infrequent salt water immersion and are not as tolerant to brackish water. Some of the plants listed in Table IV-2, such as iceplant, were originally introduced in this zone for erosion control to protect the freeway.

¹ California Department of Fish and Game, Natural Diversity Data Base, Rare and Endangered Plants and Animals in the Oakland West 7-1/2' Quadrangle, November 9, 1984.

² Abstracted from Greg R. Zitney, Principal, Western Ecological Services Company, correspondence to Bryan Grunwald, Hall Goodhue Haisley & Barker, June 4, 1985. Subject: Emeryville Waterfront Biological Survey; David Olson, "The Salt Marsh Harvest Mouse in the Emeryville Crescent Marsh," in *The East Bay Shoreline: Selected Environmental Issues*, June 1982, pp. 138-139; and Bodega Bay Institute, *The Crescent: An Environmental Assessment of the Emeryville Crescent*, June 1978.



Sources: H. B. Goldman, Hayward Shoreline Environmental Analysis, HASPA, Hayward, 1973, in Bodega Bay Institute the Crescent: An Environmental Assessment of the Emeryville Crescent, 1978.

Figure IV-2
SALT MARSH TIDAL ZONE

There are no known rare or endangered plants in the Emeryville Crescent or in the City as a whole. The adobe sanicle (*sanicula maritima*) is a plant which once grew in the area. Presumed extinct in the Emeryville Crescent, it is listed as an endangered species in California and as a candidate for threatened status on the Federal listing. Santa Cruz tarweed (*holocarpha macradenia*) may exist in the vicinity. This plant species is listed as endangered in California and as a candidate for endangered status on the Federal lists. The marsh itself is a fragile environment and has been identified for priority protection because of its importance to the Bay and the wildlife which inhabits it. The native pickleweed vegetation in the tidal zone is

¹ California Department of Fish and Game, Natural Diversity Data Base, Rare and Endangered Plants and Animals in the Oakland West 7-1/2' Quadrangle, November 9, 1984.

TABLE IV-1: EMERYVILLE CRESCENT TIDAL ZONE PLANTS

<u>Common Name</u>	<u>Botanical Name</u>
cordgrass	<i>Spartina foliosa</i>
pickleweed	<i>Salicornia</i> spp.
saltgrass	<i>Distichlis spicata</i>
alkali bulrush	<i>Scirpus robustus</i>
marsh gumplant	<i>Grindela humilis</i>

* * * * *

TABLE IV-2: EMERYVILLE CRESCENT UPLAND ZONE PLANTS

<u>Common Name</u>	<u>Botanical Name</u>
wild oat	<i>Avena fatua</i>
wild radish	<i>Raphanus satiras</i>
mustard	<i>Brassica</i> sp.
plantain	<i>Plantago lanceolata</i>
poison hemlock	<i>Conium maculatum</i>
Italian ryegrass	<i>Lolium multiforum</i>
wild barley	<i>Hordeum</i> spp.
sweet fennel	<i>Foeniculum vulgare</i>
thistles	<i>Cardus pycnocephalus</i> <i>Cirsium</i> spp. ¹
iceplant	<i>Mesembryanthemum</i> sp.
sweet alyssum	<i>Alyssum</i> sp.
broom	<i>Cytisus</i> sp.
coyote bush	<i>Baccharis pilulari</i> spp.
willow	<i>Salix</i> sp.

¹ Some species are included on the California Department of Fish and Game's "Species of Concern" list.

extremely sensitive to trampling and regenerates slowly.¹ In the northern portion of the Crescent, the mudflats are almost completely devoid of pickleweed because of the trampling which results from driftwood sculpture building.

Animals. Pickleweed and cordgrass of the tidal zone provide the primary vegetative habitat for many of the species which permanently inhabit the Crescent. These include many common rodents and small mammals. The weedy uplands of the Crescent are inhabited by migrating birds, as well as several birds which are common to urban environments. The spits at the mouth of Temescal Creek serve as roosts for some shore and water birds.² Bird species sighted frequently within the Emeryville Crescent include the great blue heron, yellow rail, Virginia rail, semipalmated plover, killdeer, black-billed plover, least sandpiper, western sandpiper, dunlin, short-billed dowitcher, Savannah sparrow, short-eared owl, and song sparrow, as well as egrets, ducks, and gulls.³

Marine life depends on the marsh and mudflats for its survival, either directly for food and shelter or indirectly for consumption of other marine creatures. The tidal mudflats are rich in invertebrate life, including worms, nematodes, crabs, and several species of clams, oysters, and mussels. These generally are found in the submerged areas and tidal mudflats. The waters of the Bay also host species of perch, flounder, smelt, and anchovy.⁴

The fresh water flow from Temescal Creek mixes with the salt water of the marsh as it flows into the Bay. This action creates a fragile transition zone between salty and fresh water, crucial for the survival of anadromous fish. This location in the Crescent has been specifically noted as a spawning ground for striped bass.

A list of regularly occurring and visiting animals in the Emeryville Crescent is presented in Table IV-3, and includes several rare and endangered species:

- Presence of the salt marsh harvest mouse (Reithrodontomys raviventris), identified on both State and Federal endangered species lists, has been documented in the Emeryville Crescent. This is the only rodent which is able to spend its entire life within the salt marsh environment, and it is endemic to the Bay Area. Tall, thick pickleweed serves as its optimal habitat, providing the bulk of its diet and protection from predators. The

¹David Olson, "The Salt Marsh Harvest Mouse in the Emeryville Crescent Marsh," in *The East Bay Shoreline: Selected Environmental Issues*, June 1982, p. 142.

²Abstracted from Greg R. Zitney, Principal, Western Ecological Services Company, Correspondence to Bryan Grunwald, Hall Goodhue Haisley & Barker, June 4, 1985, Subject: Emeryville Waterfront Biological Survey; David Olson, "The Salt Marsh Harvest Mouse in the Emeryville Crescent Marsh," in *The East Bay Shoreline: Selected Environmental Issues*, June 1982, pp. 138-146; and Bodega Bay Institute, *The Crescent: An Environmental Assessment of the Emeryville Crescent*, June 1978.

³City of Emeryville, *Final Environmental Impact Report on the Amended Redevelopment Plan*, August 1982, p. 122.

⁴California Department of Parks and Recreation, *East Bay Shoreline Feasibility Study*, December 1982.

TABLE IV-3: ANIMALS OF THE EMERYVILLE CRESCENT

Alameda salt marsh song sparrow	Forster's tern	Robin
Allen's hummingbird	Fox Sparrow	Rock dove
American avocet	Gadwall	Rough-winged swallow
American bittern	Glaucous-winged gull	Royal tern
American coot	Golden-crowned sparrow	Ruby-crowned kinglet
American golden plover	Great blue heron	Ruddy duck
American kestrel	Great egret	Ruddy turnstone
American widgeon	Greater scaup	Rufous hummingbird
Anna's hummingbird	Greater yellowlegs	Salt marsh harvest mouse
Arctic tern	Green-winged teal	Sanderling
Barn swallow	Heermann's gull	Savannah sparrow
• Barrow's goldeneye	Horned grebe	Semipalmated plover
Bat	House cat	Sharp-tailed sandpiper
Belted kingfisher	House finch	Short-billed dowitcher
Black phoebe	House mouse	• Short-eared owl
Black turnstone	House sparrow	Snowy egret
Black-billed plover	Jackrabbit	• Snowy plover
Black-bellied plover	Killdeer	Song sparrow
Black-necked stilt	Knot	Sora
Bonaparte's gull	Least sandpiper	Spotted sandpiper
Brandt's cormorant	Lesser goldfinch	Starling
Brewer's blackbird	Lesser scaup	Striped bass
Brown pelican	Lesser yellowlegs	Surf scoter
Brown towhee	Long-billed curlew	Surfbird
Brown-headed cowbird	Long-billed dowitcher	Thayer's gull
Bufflehead	Long-billed jaeger	Tree swallow
•• California black rail	Mallard	Turkey vulture
••• California clapper rail	Marbled godwit	Vagrant shrew
• California gull	Mew gull	Violet-green swallow
••• California least tern	Mole	Virginia rail
Canvasback	Mourning dove	Vole
• Caspian tern	Mud snail	Wandering tattler
Cinnamon teal	Northern phalarope	Water pipit
Cliff swallow	Norway rat	Western Fence lizard
Common egret	Oldsquaw	• Western grebe
Common flicker	Orange-crowned warbler	Western gull
Common gallinule	Ornate shrew	Western harvest mouse
Common goldeneye	• Osprey	Western meadowlark
• Common loon	Parasitic jaeger	Western sandpiper
Common scoter	Pectoral sandpiper	Whimbrel
Common snipe	Pintail duck	White pelican
Common tern	Pocket gopher	White-crowned sparrow
Dark-eyed junco	Rat	White-throated swift
Deer mouse	Red phalarope	White-winged scoter
• Double-crested cormorant	Red-breasted merganser	Willet
Dublin	Red-tailed hawk	Wilson's warbler
Eared grebe	Red-winged blackbird	• Yellow rail
• Elegant tern	Redhead	Yellow-rumped warbler
Emperor goose	Ring-billed gull	

Source: Bodega Bay Institute, The Crescent: An Environmental Assessment of the Emeryville Crescent, June 1978; Greg R. Zitney, Western Ecological Services Company, correspondence to Bryan Grunwald, Hall Goodhue Haisley & Barker, June 4, 1985 (Subject: Emeryville Waterfront Biological Survey).

• On "Species of Concern" list.

•• California listed as rare.

••• California and federal listed as endangered.

Note: Bodega Bay Institute Study includes the portion of the Crescent which is in the City of Oakland.

harvest mouse exists mainly south of the Emeryville border, where pickleweed grows thickly. Trampling of pickleweed in the sculpture garden mudflats near Temescal Creek has destroyed most of its habitat within Emeryville.

- The California clapper rail (Rallus longirostris obsoletus) is likely to reside where marsh grass is predominant. This bird was nearly extinct in 1913, before the Migratory Bird Act was enacted, which helped increase its numbers. It is listed as endangered on Federal and California lists.
- The California black rail (Laterallus jamaicensis coturniculus), a rare species on the State list and a candidate for Federal listing as threatened (Category 2), has been observed.
- A stable population of the California least tern (Sterna antillarum browni), endangered on both State and Federal lists, is known to exist at the Alameda Naval Air Station and visits the Crescent during the summer breeding season.
- The endangered California brown pelican (Pelecanus occidentalis californicus) is a common sight from summer through late fall.

The peregrine falcon (Falco peregrinus anatum), also an endangered species, could occasionally forage in the Crescent. The snowy plover (Charadrius alexandrinus), double-crested cormorant (Phalacrocorax auritus), white pelican (Pelecanus erythrorhynchos), long-billed curlew (Numenius Americanus), short-eared owl (Asio flammeus), song sparrow (Melospiza melodia), and several other birds (listed on Table IV-3) are among the "species of concern" found along the greater East Bay shoreline. The Crescent is thought to be the only location on the North American Pacific Coast where the arctic tern has been known to land on shore.²

Public Trust

When California entered the Union in 1850, it took ownership of all tidal and navigable waters and the lands under them to hold in public trust for the people of the State. Notwithstanding this trust, large tracts of land were sold to private parties by the Board of Tide Land Commissioners (BTLC), created in 1868 to take possession of

¹ California Department of Fish and Game, Natural Diversity Data Base, Rare and Endangered Plants and Animals in the Oakland West 7-1/2' Quadrangle, November 9, 1984; California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982.

² California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 12; Bodega Bay Institute, The Crescent: An Environmental Assessment of the Emeryville Crescent, June 1978, p. 26.

submerged and tidal lands and sell lots within its boundaries.¹ Figure IV-1 illustrates the boundaries of the tidal lands that were "sold."

Abuses in the sale of tidelands led to a law in 1879 which prohibited the sale of these lands to private parties within two miles of an incorporated City. The law also stated that the public right-of-way must not be obstructed on these waters when they are required for a public purpose. This, in effect, placed tideland areas (generally land below the mean high tide line) in what is known as the "public trust."²

In City of Berkeley v. Superior Court, 26 Cal 3d 515 (1980), the court ruled that the State is the owner of the public trust easement over submerged lands and tidelands conveyed by BTLC deeds. Private ownership of the wetlands is restricted to the underlying fee title only. When an exercise of the trust is for a valid purpose such as open space, passive recreation, wildlife habitat or water usage, the State does not need concurrence of adjoining or underlying fee owners. Furthermore, the State is not required to compensate the private fee owner for diminution in the number of uses to which the underlying fee can be put, as exercise of the trust does not represent a "taking" of the property.³ The court also ruled that BTLC parcels which were filled and no longer physically considered tidelands as of 1980 would not be subject to the trust, although they still are subject to public access pursuant to BCDC permit requirements.⁴

Emeryville has requested the State Lands Commission to determine its rights to exercise the public trust over the Bay shoreline areas, particularly the Emeryville Crescent. The State Lands Commission has responded that it is the City's prerogative to exercise the trust, and that there are no likely impediments to Emeryville's doing so.⁵ The City is currently investigating the extent of the public trust over privately owned property fronting on the Bay and the public rights under this trust. This study is being undertaken in consultation with the State Lands Commission. When the study is complete, Emeryville will be better able to amend this Plan, if necessary, to respond to public and private rights and needs. The following policies apply to all publicly owned property on the Bay, and will be considered for application to privately owned property on the Bay.

D. AIR QUALITY

Introduction

Air pollution represents a major environmental problem in the Bay Area. Most air pollutants are caused by human activities such as motor vehicle use or industrial emissions. Some pollutants directly threaten human health; others discolor the air or reduce visibility.

¹ California State Lands Commission, Public Trust Rights and Needs in the Albany Baylands, October 1982, pp. 16, 20.

² California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 14.

³ California State Lands Commission, Public Trust Rights and Needs in the Albany Baylands, October 1982, pp. 20-21.

⁴ Ibid., p. 16.

⁵ Michael R. Valentine, Staff Counsel III, California State Lands Commission, November 28, 1984.

Air quality in Emeryville is generally good due to clean air blowing off the ocean and San Francisco Bay. These are predominantly southwesterly winds (37%) with a significant amount of calm (32%). These same winds can, however, contribute to problems at downwind sites such as the Diablo and Santa Clara Valleys.¹

The passage of the Air Quality Act of 1967, subsequently known as the Clean Air Act, provided the first national program to control pollution from automobiles and stationary sources. Under the provisions of this Act, states submit plans for control of air quality. California began setting standards in 1969 with the passage of the Mulford-Carrell Act. The State of California employs more stringent regulations than Federal requirements for vehicle emissions under a program administered by the Air Resources Board.

Ambient Air Quality

In the Bay Area, Federal ambient air quality standards for ozone and carbon monoxide are exceeded, and the Federal standard for total suspended particulates is exceeded on occasion. Because these air quality standards are not being met, the entire Bay Area has been designated by the U.S. Environmental Protection Agency as a "non-attainment" area for these pollutants. The 1982 Bay Area Air Quality Plan, prepared by the Association of Bay Area Governments (ABAG) and other government agencies, identifies measures to reduce emissions from both stationary sources and motor vehicles to levels which will result in attainment of air quality standards by 1987.

The Bay Area Air Quality Management District (BAAQMD) guides air quality planning in the Bay Area, and documents and enforces compliance with standards. Any company which builds or expands a facility in the Bay Area must first obtain a permit from the BAAQMD.² The District regulates the quantity and type of emissions allowed from all facilities.

Over 90% of the carbon monoxide in the air is emitted from vehicular sources. Local, unmonitored exceedances of standards for this pollutant can potentially occur where traffic is congested and cars are idling for long periods of time. Particulates, sulfur oxides, and nitrogen oxides often are emitted from industrial facilities, and are mainly the result of incomplete fuel combustion. Nitrogen dioxide and ozone are major ingredients in the formation of photochemical smog, which creates a brown discoloration in the air.

Monitoring stations closest to Emeryville are located in Oakland and Richmond. Standards were not exceeded at these stations for any of the regulated pollutants in 1984, the latest year for which information is available. Nevertheless, while air quality actually is a regional problem, the land use, circulation, and growth decisions made by local communities such as Emeryville will significantly affect the outcome of regional air quality planning.

¹City of Emeryville, Final Environmental Impact Report on the Amended Redevelopment Plan, August 1983, p. 75.

²Bay Area Air Quality Management District, Air Quality Handbook, 1983-1984.

E. ENERGY

Introduction

While an Energy Element is not specifically mandated by State law, Government Code Section 65303(k) states that the General Plan may include "such additional elements dealing with other subjects which, in the judgment of the planning agency, relate to the physical development of the county or City." The need to conserve energy and develop new sources is a pressing national problem. Local government agencies are not responsible for or capable of locating new sources of fossil fuels; they can, however, encourage development or use of renewable sources of energy such as solar and wind power. Local governments can also influence the amount of energy that is consumed.

In fact, it is the local governments, rather than Federal or State agencies, which will be most effective in directing energy uses in the years ahead, since locally initiated programs are implemented more quickly and effectively than State or Federal programs. At the local level, actions can be taken more quickly and can be tailored to the community's needs and regulatory processes. Local governments can exert direct control or influence over several major determinants of energy use, such as land use and infrastructure patterns, building type and construction, and behavior. It is for this reason, and to highlight the special significance of this issue, that the City of Emeryville is including a separate Energy Element in its General Plan. Energy use and conservation, as directed under the policies of this element, is related closely to the policies of the Land Use and Circulation Elements.

In some cases, it is very easy and inexpensive to implement an energy efficiency option initially and much more difficult and costly to do so later. This is especially true of passive design measures. It may cost nothing to provide for solar access in a new structure but may be impossible to do so once it has been built. Since a residential structure built today will probably still be standing 75 or 100 years from now, it is critical that it be built energy-efficient.

Another example of the long-term energy implications of local government decisions is the relationship of a given land use pattern to the transportation system required to service it. A pattern characterized by large residential lots will virtually guarantee dependence on the automobile. In contrast, the concentration of the same number of residents on smaller lots within walking distance (approximately 1,000 feet) of major streets will generate a level of transit ridership sufficient to guarantee self-supporting public transit (i.e., fare box revenues which cover costs). In both cases, the type and overall intensity of land use is the same. However, a concentrated development pattern is more conducive to a successful transportation system.

Future Energy Strategy

Increased growth within the City will result in increased energy use. The primary goal of Emeryville's energy policies should be reduced reliance on non-renewable, imported sources of energy, while encouraging use of alternative sources of energy such as passive and active solar heating systems. The effort to achieve this goal

should be aimed both at (1) conservation, i.e., reducing overall consumption rates; and (2) production, i.e., using energy produced in Emeryville, preferably from renewable sources such as solar or wind energy. In a sense, production or use of energy from renewable sources is the ultimate conservation tool. Conservation of non-renewable resources, while an essential short-term strategy, does not produce energy, but rather rations the use of a finite resource and merely delays its ultimate depletion.

Local governments can implement energy consumption and conservation programs more effectively than State or Federal governments. This is because they can exert direct control or influence over several major determinants of energy use, including:

- **Land Use and Infrastructure Patterns.** Large-scale land use policies and decisions can determine locations for concentrations of population which are in close proximity to housing, employment, services, and public transportation to reduce the population's dependence on private automobiles. The local infrastructure and land use patterns will also determine the extent to which major alterations in the supply of oil (such as the 1974 gasoline shortage) disrupt the lives of residents.
- **Building Type and Construction.** Local regulations can control the location, size, height, and siting of structures, and may require passive or active solar design of hardware which restricts or controls energy demand for heating, lighting, or water usage. Typical programs include the adoption of ordinances to require that the thermal efficiency of existing structures be upgraded, that standards affecting new construction be modified to better address local climatic conditions, that solar water heating be required in new and/or existing structures, and that solar access to existing or potential solar collectors be provided and protected.
- **Behavior.** This is one of the most important determinants of energy use. Local government can implement educational programs and regulations intended to facilitate behavioral changes, such as turning off unnecessary lights and electrical appliances, much more easily than can State or Federal agencies.

The following energy conservation techniques would result in greater energy efficiency:

- **General**
 - Encourage implementation of basic conservation methods in all new and existing structures through an education program.
 - Encourage mixed land uses to reduce the average length of trips and reliance on automobiles.
 - Install sodium-vapor or other energy-efficient street lights.
 - Encourage use of public transportation.
 - Review site plans for solar access to residential dwellings; use landscaping to block winds, provide shade in summer, and allow solar access in winter.

- Residential: New Development
 - Locate housing near public transportation, employment, and services.
 - Require "passive" solar building design:
 - Largest wall and window areas should face south; kitchen and living rooms should be located on this wall.
 - Glazed areas should be very limited on north- and east-facing walls.
 - Use of overhangs or eaves above south-facing windows will prevent summer overheating, while still allowing winter sun access.
 - Design to allow "through" ventilation from windows and doors.
 - Encourage common walls and clustered residential developments.
 - Reduce paved areas.
 - Require drought-tolerant landscaping and water-efficient irrigation systems.
- Residential: Retrofit
 - Insulate.
 - Weather-strip doors and windows.
 - Hang heavy draperies.
 - Install solar heat collection system.
- Non-Residential: New Development
 - Require co-generation (use of waste heat) for industrial sites as a means of more efficient fuel utilization.
 - Encourage solar energy for process heat and water heating for industrial buildings.
 - Restrict average illumination in commercial buildings to approximately 2.0 watts per square foot.
 - Reduce general commercial lighting (decorative and advertising).
 - Encourage transportation systems management (TSM) programs to reduce fuel consumption by private vehicles.
 - Develop building energy management programs to reduce energy use during off-peak hours.
 - Encourage alternate work hours to reduce peak-load energy requirements.
- Commercial: Retrofit
 - Reduce overall illumination and concentrate "task" lighting where needed.
- Insulate where appropriate.

F. CULTURAL AND HISTORIC RESOURCES

Introduction

Historic resources provide us with a link to the people and cultures of the past. Preservation of archaeologic, historic, or architecturally significant sites can enrich Emeryville's cultural heritage and identity. Scientific study of these sites can provide clues to human behavior in general and to past culture in particular. If development is properly planned and designed with these resources in mind, the City may benefit economically as well.

According to the Public Resources Code (Section 5020.1), historic resources:

"... includes but is not limited to any object, building, structure, site, area, or place which is historically or archaeologically significant, or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

This element seeks to protect archaeological, historical, and architectural resources, and to exploit these resources, where appropriate, to develop Emeryville's cultural identity without sacrificing its integrity. The presence of significant sites or structures in an area proposed for development does not necessarily mean that development cannot occur. Extremely important archaeological sites should not be disturbed; but on many sites, development can be designed to avoid destruction of culturally, scientifically, or religiously significant remains. For important buildings, the objective is not normally to leave them undisturbed, but to encourage their use for current activities while preserving or enhancing their character and integrity.

Prehistoric Resources¹

The first inhabitants of the San Francisco Bay Area were the Costanoan Indians, who lived along the Bay's shoreline more than 4,000 years ago. Marsh land, particularly where freshwater creeks entered the Bay, were desirable home sites for the Indians. This type of environment was found along the original Bay marshlands, near the Southern Pacific Railroad tracks (see Figure V-11).

One remnant of the Indian occupation of this locale is the shellmounds along the waterfront. The Emeryville Shellmound—one of the largest in the Bay Area—was estimated to have been 1,000 feet long, 300 feet wide, and 22 feet high. It was located east of Interstate 80 in the vicinity of Temescal Creek. The railroad track may traverse a portion of the mound remnant, which is approximately 8.5 feet below the surface.² The shellmound is listed in the California Inventory of Historic Resources³ and in California Historic Landmarks.⁴ Archaeological excavations of the shellmounds began as early as 1902. Several other sites in the vicinity of the creek have been recorded.⁵

The portion of Interstate 80 that runs through Emeryville has been archaeologically surveyed, as has a small area near Temescal Creek. These surveys did not identify any archaeological resources. Shellmounds may also occur in marsh areas with no

¹Summary largely abstracted from Christian Gerike, Assistant Coordinator, California Archaeological Inventory, Sonoma State University, correspondence dated December 2, 1984.

²City of Emeryville, Final Environmental Impact Report on the Amended Redevelopment Plan, August 1983, p. 131.

³California Department of Parks and Recreation, California Inventory of Historic Resources, 1976.

⁴California Department of Parks and Recreation, California Historic Landmarks, 1982.

⁵Caltrans, Environmental Planning Branch, Archaeological Survey Report for Proposed High Occupancy Vehicle Lanes from Bay Bridge to Carquinez Bridge, May 1982.

freshwater source immediately adjacent; therefore, it is moderately to highly probable that other unrecorded prehistoric shellmounds exist in the vicinity of the original shoreline. This possibility is greatest near the northern City limits, where an 1878 map depicts a creek entering the Bay. Prehistoric sites prior to the rising of the Bay about 5,000-6,000 years ago may exist below the current Bay level.

Based on archaeological records, the California Archaeological Inventory has determined that the shellmounds in the Emeryville area have been destroyed. However, there have been no studies to confirm this, and there is a high possibility that subsurface deposits of these sites, or of other unrecorded sites, still may exist in the areas of old marshland and creeks.

Later History and Culture¹

Colonists of the Spanish Empire first introduced agriculture and domesticated animals to the region in 1820. Luis Maria Peralta received the first land grant of more than 48,000 acres, encompassing an area from Emeryville northward to include what is now the northern portion of Alameda County. Mexican citizens settled the area from 1822 to 1846.² The mouth of Temescal Creek was used at that time as a landing for the Peralta family's Rancho San Antonio.

The California Gold Rush attracted thousands of immigrants, and the Peralta family could no longer retain control of the entire land grant. Structures had been built throughout Emeryville, and by 1878, most of the City had been urbanized. The East Bay's oldest steel mill, Judson Steel, began operations in 1882, initiating the City's extensive industrial development.

Historic Buildings. None of the older structures in the City are identified or registered as historic properties by the State Office of Historic Preservation or the National Register of Historic Places. However, there are several areas and structures with local historical and/or architectural merit. These are not necessarily of regional significance; but they do identify and characterize the City's heritage.

A number of the brick industrial buildings dating from the early 20th Century are in excellent physical condition. These buildings were built in an era of extensive industrial expansion nationwide which corresponded to the extension of railroad lines, and represent an important point in Emeryville's history. They are concentrated in the vicinity of Park Avenue, 45th Street, Hollis Street, and Horton Street.

Among the buildings of particular interest are Trader Vic's, Pelco Distributors, and the artist's co-op. Town Hall, at Hollis Street and Park Avenue, is an ornate domed Victorian built in 1890. Although it is not a particularly remarkable example of the architecture of its period, it remains the most important feature of Emeryville's historical development.

¹Largely abstracted from Christian Gerike, op. cit.

²California Department of Parks and Recreation, East Bay Shoreline: Feasibility Study, December 1982, p. 13.

Several neo-classic structures can be found along San Pablo Avenue near Yerba Buena Avenue and MacArthur Boulevard. These include the Bank Club, Ritz Hotel, J. C. Paper Company, the MacKinnon Building and the Golden Gate Key and Lock Company. The Triangle contains groups of excellent craftsman bungalows and Victorian structures. The Veteran's Memorial Building, a post-World War I structure which displays art deco and modern details, currently houses the Senior Citizen Center.

Along Powell Street, several noteworthy buildings have been reused for different purposes; these include the neo-classic Hamar Brothers Tile building and the office building at 1475 Powell Street. Balaam Brothers, originally Cook Stove Oil Company, has been noted as an excellent example of vernacular architecture, described as "... a 1930s wood radio set stuccoed and blown up to building size.² The Town House on Doyle Street, a 1920s speak-easy,³ is currently used as a restaurant. Westinghouse and ITT Grinnell, both large industrial buildings, are structurally sound and suitable for re-use. Four-story Westinghouse boasts large windows and an ornamented facade; ITT Grinnell displays a curiously turreted facade which marks the edges of rows of clerestory windows.

Properties which contributed significantly to the historical or cultural development of Emeryville or the region, especially those which have not been significantly altered, are likely to be eligible for listing in the National Register of Historical Places, California Historic Landmarks, or the California Inventory of Historic Resources. The Town Hall is a candidate for listing on the National Register; many of the industrial buildings dating from the 20s or 30s may also be eligible.⁴ The California lists automatically include properties listed in the National Register.

One more year of funding is available under the California Parks and Recreation Facilities Act of 1984 (California Public Resources Code, Division 5, Chapter 1.691) for acquisition, development, rehabilitation or restoration of historical resources. Grants may fund preservation projects and the costs of planning and interpretation. The program is administered by the Office of Historic Preservation of the California Department of Parks and Recreation. Publicly owned properties which meet criteria for the National Register are eligible for funding.

California Historic Landmarks and buildings on the National Register do not have to meet current building code standards, except for those which protect public health and safety. Instead, these properties can use the State Historic Building Code. The

¹City of Emeryville, Final Environmental Impact Report on the Amended Redevelopment Plan, August 1983, p. 131, from Mark A. Wilson, East Bay Heritage: A Potpourri of Living History, California Living Books, San Francisco Examiner, 1979.

²David Gebhardt, et al., A Guide to Architecture in San Francisco and Northern California, 1973.

³City of Emeryville, op. cit.

⁴Don Napoli, State Office of Historic Preservation, February 6, 1986.

code that was in force at the time the building was constructed may be used as alternate.¹ Federal tax investment credits of up to 25% are available for restoration or rehabilitation of buildings which are currently or will be listed on the National Register. Older, non-certified structures can receive from a 15% tax credit for structures more than 30 years old to a 20% tax credit for structures more than 40 years old, if they are substantially rehabilitated and if 75% of existing external walls are retained.² Thus, developers are often provided economic incentives to preserve local historic resources at little or no cost to local government. Such investment often spurs additionally investment, ultimately resulting in financial advantage for the community.

To be added to the National Register, the State Office of Historic Preservation and other State and Federal Agencies complete a nomination procedure which is often initiated by a community. A description of the property, including a statement of its significance, are among the requirements in the forms which are submitted to the Historic Preservation Office, to be sent to Washington following additional research. Abbreviated information provided by the property owner can receive a preliminary determination of eligibility from the State if the property owner desires an early assessment of the possible tax benefits.

Additions to the California Inventory of Historic Resources are normally proposed by a community following a citywide survey. Often several groups of buildings are added to the list as a result. The California Landmarks proposals require less detail than the California Inventory.

¹Ibid.

²City of Emeryville, Final Environmental Impact Report on the Amended Redevelopment Plan, August 1983, p. 132.

damaging their integrity. For example, a feature describing the Costanoan civilization may be incorporated into any parks or other public facilities in the vicinity of Shellmound Street and Temescal Creek, provided that further remnants which still may exist are not at risk of vandalism or unauthorized excavation.

4. Reuse of architecturally interesting industrial buildings should be encouraged, particularly where there are many such buildings grouped together.

Implementation

1. Retain a qualified archaeologist during construction to conduct on-site monitoring for the existence and extent of potential archaeological resources in areas known to have a high potential for such resources; for example, in the vicinity of Temescal Creek, east of the railroad track; the historic Bay shoreline; or the creek which previously entered the Bay in the northern portion of the City (private developers).
2. Require an EIR for those projects which could have a significant effect on archaeological resources (City). A field survey by a qualified archaeologist may be required, at the developer's expense, to determine the presence, extent, condition, and significance of the potential resources. The archaeologist should determine the potential impact of the project on the resources and possible mitigation measures to avoid or reduce those impacts. This survey should be conducted prior to issuance of final project approval, to avoid unnecessary delays once the project is underway.
3. Encourage participation by interested citizens and professionals in identification of and recommendations for potential historic or cultural sites or buildings (City, citizens' organizations). Request California Historical Landmark Status for those properties which appear eligible. This program should be initiated by demonstrated community interest and should be supported by the City following completion of an inventory of historic resources.
4. Adopt an archaeologic/historic preservation ordinance which specifies procedures to be followed in the event that significant resources are discovered during the development process (City). Incorporate recommendations from the archaeological or historical survey.
5. Create a historic district overlay for properties in the vicinity of Park Avenue and Horton Street to promote development which preserves the architectural integrity of the area (City).
6. Encourage owners of eligible historic properties to apply for State and Federal registration for these sites and to participate in tax incentive programs for historic restoration (City, landowners, State and Federal agencies).
7. Coordinate with private and non-profit organizations to establish additional funding sources to acquire and preserve sites or to acquire easements over sites and building facades which are worthy of preservation (City, private and non-profit organizations).

CHAPTER V: PUBLIC HEALTH AND SAFETY

A. INTRODUCTION

The City has a responsibility to plan for a safe environment in which the public is reasonably protected from risks to life, health and property. The Public Health and Safety component of the General Plan contains provisions that seek to minimize the risks from natural and man-made hazards. It is designed to identify areas where private and public decisions on land use need to be sensitive to hazardous conditions caused by seismic activity, flood, fire, and noise. It also considers man-made threats to the community's well-being, such as criminal activities and the many problems associated with hazardous materials. It further serves to inform individuals, firms, and public agencies of the City's policies on the compatibility of certain land uses and activities with the hazards that are present on a site, as well as the City's plans to respond to an emergency.

State planning law requires cities and counties to identify hazardous conditions and to prepare and implement policies to assure public health and safety. The legislative basis of these requirements is contained in the following sections of the Government Code:

- Section 65302(a) which requires preparation of a land use element to include identification of areas which are subject to flooding.
- Section 65302(d) which requires preparation of a conservation element to establish guidelines for conservation, development, and utilization of natural resources, and may cover flood control and prevention of water pollution.
- Section 65302(e) which requires preparation of an open space element to include special management or regulation of areas that may endanger public health and safety.
- Section 65302(f) which requires preparation of a noise element that quantifies the community noise environment and serves to guide development to achieve noise-compatible land uses.
- Section 65302(g) which requires preparation of a safety element to include an identification and appraisal of seismic and other geologic hazards, flooding and fires, and emergency response.

The policies which are presented in each of the elements of this component are formulated to prepare for, prevent and respond to potential hazards. However, it is unrealistic to think in terms of a completely hazard-free environment, as natural and man-made hazards are always present. Consequently, the policies contained herein implicitly consider the costs versus the benefits of hazard prevention.

The elements of this component overlap with those of some other groups. Safety issues were considered in the designation of land uses. Community design and the provision of public services has some bearing on the hazards related to fire and crime prevention. Many environmental hazards, such as water quality and flooding hazards,

are closely related to environmental resources. Hazardous materials can directly and indirectly affect such environmental resources as air, water and wildlife. Lastly, the design of a community and the efficiency of its circulation system are intimately linked to the ability of the community to respond to an emergency. The following elements are included in this component:

- Geotechnical Hazards;
- Flood Hazards;
- Noise;
- Hazardous Materials
- Fire and Crime; and
- Emergency Preparedness

B. GEOTECHNICAL HAZARDS

Introduction

Earthquake hazards present a considerable threat to safety in Emeryville. The City lies between three major faults: the San Andreas fault to the west, and the Hayward and Calaveras faults to the east. The epicenters of most significant earthquakes are located on or near faults. Many earthquakes have been felt in the Emeryville area, although most of these have been relatively minor. Because the potential damage that could be caused by significant geotechnical activity could be great, State planning law requires local communities to address these issues and plan for them through land use and building code strategies.

The earth's crust is constantly shifting. Earthquakes resulting from this activity are the result of the collision of separate blocks or "plates" of the earth's crust along faults. Major earthquakes result when these collisions occur at shallow depths; less intense surface movements occur when the collisions occur at greater depths or involve smaller blocks or shorter faults.

The results of an earthquake can include ground shaking, ground failure, and flooding from dam failures or seismically induced waves in large bodies of water. The threat that these phenomena represent to the health and safety of the community are related to the geologic composition of the soils, the designated land uses and activities, the number of people who could be affected, the ability of structures to withstand seismic shaking, and the ability of the community to respond to an emergency. Ground shaking and ground failure are discussed in this element; water inundation is discussed in the Flood Hazards Element. Community response is covered in the Emergency Preparedness Element.

Geologic History¹

The oldest predominant rock group in the Bay Area was deposited from late Jurassic to mid-Cretaceous time, 100 to 140 million years ago. These rocks, known as the Franciscan Formation, comprise the bedrock underlying the waters of the bay. Extensive folding and faulting of the earth's crust formed the predominant mountain range in the region, the Coastal Range. These movements later formed the trough that is now San Francisco Bay. This occurred about 3 million years ago. The trough was filled with sediments during Pleistocene time (about 1 million years ago) from erosion of the surrounding hills and some marine deposits.

Soils. The bedrock of the San Francisco Bay Area was deposited from 100-140 million years ago. Over time, sediments were deposited on the bedrock. These sediments comprise the alluvium over which most of Emeryville lies. Rising sea levels, caused by meltwater from glaciers in other parts of the world, flooded the trough to form the San Francisco Bay. Emeryville is situated at the eastern edge of the Bay. The western portion of the City is situated on what was formerly Bay marshland. Groundwater can generally be found within 10 feet of the surface, and in some areas within 4 feet of the surface.

Bay Mud and Landfill. Layers of clayey gravel, silt, clay, and gravel of the Temescal Formation, Merritt Sand, and San Antonio Formation overlie the Alameda Formation on the plain between the Berkeley Hills and the Bay, and underlie parts of the Bay ("older bay mud"). Fine sand, silty clay, and mud of more recent age ("younger bay mud" deposited during the melting of the Wisconsin continental glaciers) overlie the first bay mud deposits and often comprise foundations for artificial fill along the perimeter of the Bay. The younger bay mud, generally 15-30 feet thick but reaching thicknesses up to 130 feet, was deposited within the last 9,000 years.

Bay mud underlies approximately one-third of the City, or most of the area west of the railroad tracks. This area has been artificially filled, beginning about 1900 and continuing through the mid-1970s when the fingertip of the Peninsula was added to Emeryville. The fill is mostly clay and/or sandy soil interspersed with construction and industrial waste materials.²

Surficial Soils. The remainder of the surficial soils in the City are predominantly fine-grained alluvium, which is plastic, moderately to poorly sorted carbonaceous silt and clay, less than 15 feet thick, and deposited in the late Holocene period (within the last 5,000 years). This overlies Late Pleistocene alluvium deposits, which are 10,000-30,000 years old. The Pleistocene deposits exist surficially to the east of the City. Ground water generally can be found within 10 feet of the surface and in some areas within 4 feet of the surface.

Table V-1 summarizes some of the properties and behavioral characteristics of the City's surficial soils.

¹ This discussion is largely abstracted from Harold B. Goldman, "Geology of San Francisco Bay," in *Geologic and Engineering Aspects of San Francisco Bay Fill*, California Division of Mines and Geology Special Report 97, 1969.

² City of Emeryville, *Final Environmental Impact Report on the Amended Redevelopment Plan*, August 1983, p. 125.

TABLE V-1: PROPERTIES OF EMERYVILLE'S SURFICIAL SOILS

	<u>Dry Density¹</u>	<u>Permeability & Drainage²</u>	<u>Seismic Wave Amplification³</u>	<u>Suitability of Urban Development⁴</u>
Qhbm - Bay mud	Low	Low	High	Low
Qhaf - Fine-grained alluvium	Moderate	Low	Low	Moderate
Qham - Medium-grained alluvium	Moderate	Low-Moderate	Low	Moderate
Qpa - Pleistocene alluvium	Moderate	Low Moderate	Low	High

Source: E. J. Helley et al., Flatland Deposits of San Francisco Bay Region, California, Geological Survey Professional Paper 943, 1979.

¹The mass of earth materials relative to an equal volume of water. Higher densities are generally better foundation materials.

²Permeability is the capacity to transmit a fluid. Low permeability may be associated with poor drainage and problems of standing water especially during the rainy season.

³Seismic wave amplification is the property to intensify the ground response to an earthquake. High amplification would suggest greater hazards from earthquakes.

⁴Suitability considers shrink-swell potential, settlement, flooding, permeability, liquefaction, and seismic wave amplification.

Potential Hazards

Active Faults. Figure V-1 illustrates the faults in the Bay Area. The San Andreas fault, approximately 16 miles west of the City, is the most active fault in the region. Its two major branches on the east side of the Bay, the Hayward and Calaveras faults, are located approximately 4 miles and 13 miles east of the City, respectively. The largest earthquake that is likely to occur on a given fault, called the maximum credible earthquake, is estimated at magnitude 7.3 on the Richter scale

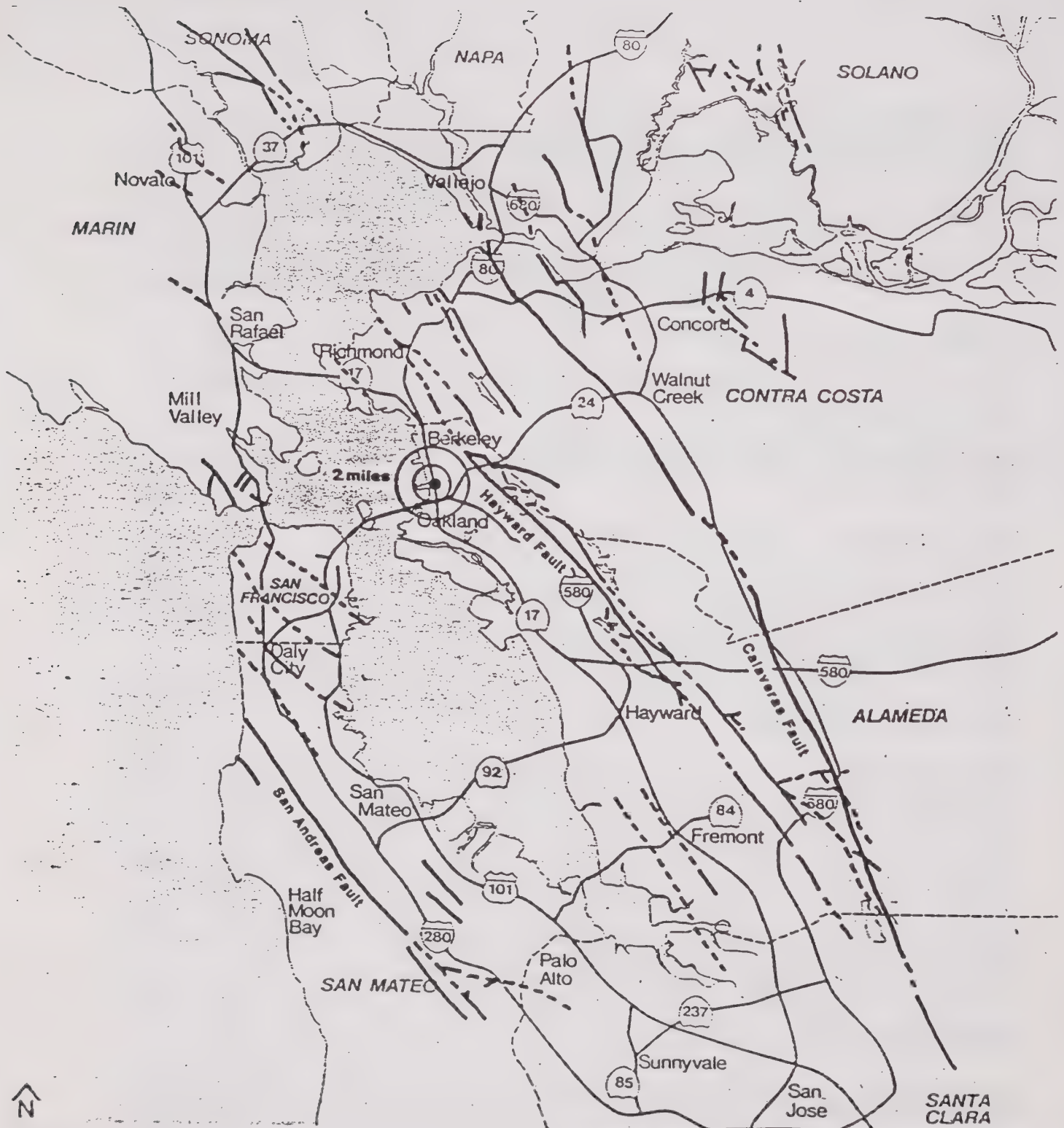


Figure V-1
REGIONAL FAULT TRACES

SOURCE: BCDC, The Bay Plan, September 1983; SCA; ABAG, Earthquake Hazard Mapping Program, March 1980; Goldman, Geologic and Engineering Aspects of San Francisco Bay Fill, 1969.

- FAULT
- INFERRED FAULT

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for the Hayward and Calaveras faults, and at magnitude 8.4 for the San Andreas fault.

Ground Shaking. Ground shaking is the most noticeable phenomenon associated with seismic activity. Damage to buildings is the immediate and recognizable result of considerable ground shaking. The theoretical maximum ground shaking intensity for a given area is a measure of the potential ground movement and is a function of the maximum credible earthquake for a given fault, the geologic properties of the area, and distance to the fault. The amount of damage sustained depends upon the intensity of the earthquake and the type of building construction.

Maximum ground shaking intensity for Emeryville would be associated with the Hayward fault, which is closer to the City than the San Andreas or Calaveras faults. It is expected to be high due to the relatively unstable soils and closeness to the fault. As shown in Figure V-2, the area west of the railroad tracks, where the land consists of artificial fill placed on top of bay mud, could experience violent ground shaking, which could cause widespread cracking and collapse in brick and wood-frame buildings, cracking of streets, destruction of foundations, and breaking of utility lines. Southern Pacific Pipelines Inc. has an 8-inch pipeline that carries refined petroleum products from Richmond through Emeryville to Oakland. Intense ground shaking from an earthquake could damage the pipeline, creating potential fire and groundwater contamination hazards. Elsewhere in the City, the soils are alluvium, which is also relatively unstable, and ground shaking could be very strong, which could cause collapse of most masonry chimneys, considerable cracking of masonry buildings, some tilting and occasional collapse of wood-frame buildings, and cracking and crushing of foundation walls.²

In general, buildings constructed prior to 1965 are not reinforced. Most brick buildings and those with windows continuous to the corners of the structure can be considered unreinforced structures. Concrete tilt-ups and other structures erected after seismic safety requirements were added to the Uniform Building Code in 1965 are not generally thought to present earthquake hazards to building occupants,³ although the results of the 1985 Mexico City earthquake suggest a need to re-evaluate the Building Code.

Ground Failure. Ground failure is the inability of the ground to maintain its strength during earthquake shaking. The phenomena includes such failures as surface rupture, landslides, liquefaction, lateral spreading, subsidence, and settlement. All of these involve displacement of the ground surface due to loss of strength or failure of the underlying materials during earthquake shaking.

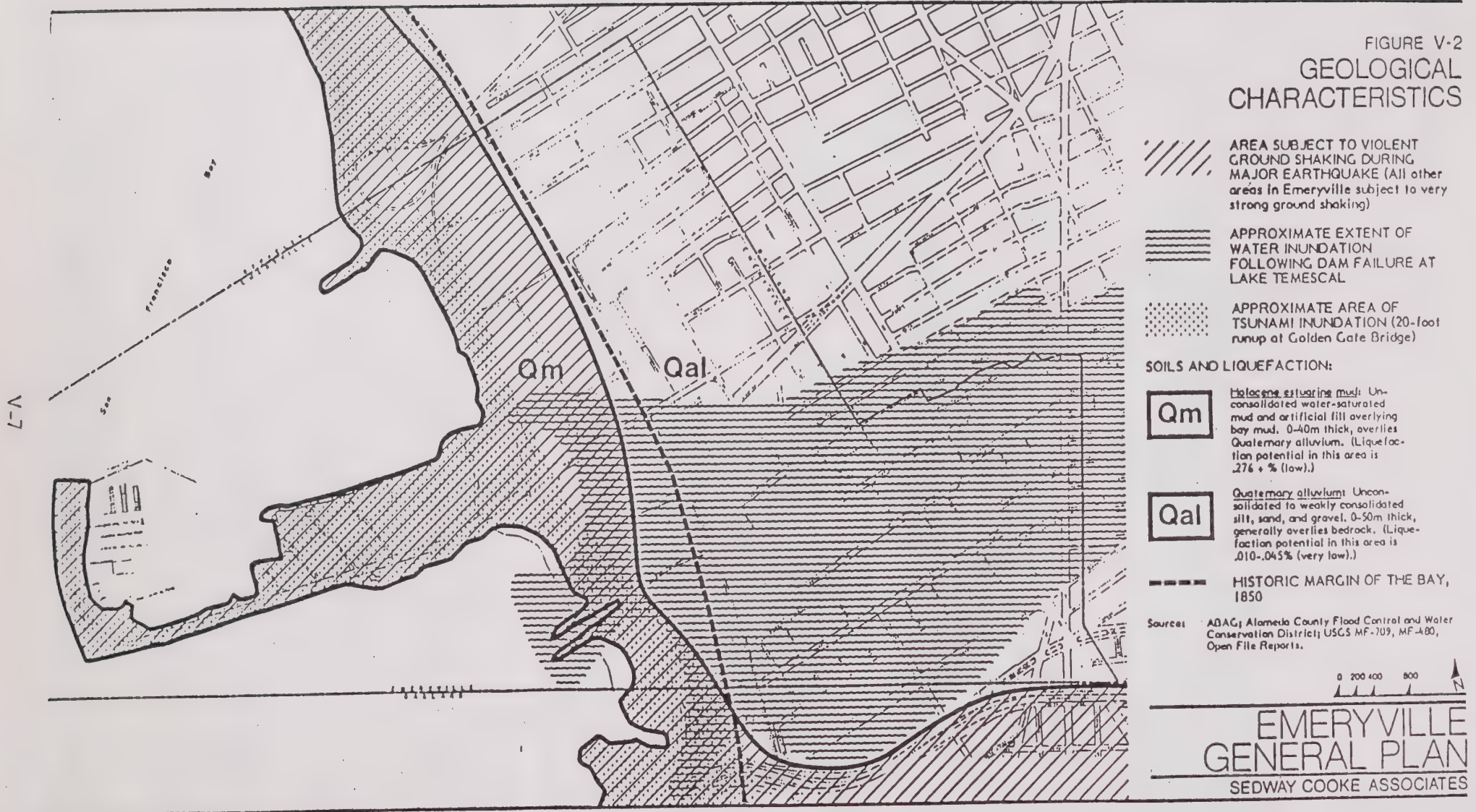
No known faults lie within the City. Consequently, neither horizontal rupture nor vertical faulting should pose a danger. However, a presently unidentified fault,

¹ Association of Bay Area Governments, Earthquake Hazard Mapping Project, Working Paper #17, December 1983, p. 5.

² Ibid.

³ Bill Burke, Building Inspector, City of Emeryville, November 11, 1984.

FIGURE V-2
GEOLOGICAL
CHARACTERISTICS



AREA SUBJECT TO VIOLENT GROUND SHAKING DURING MAJOR EARTHQUAKE (All other areas in Emeryville subject to very strong ground shaking)

APPROXIMATE EXTENT OF WATER INUNDATION FOLLOWING DAM FAILURE AT LAKE TEMESCAL

APPROXIMATE AREA OF TSUNAMI INUNDATION (20-foot runoff at Golden Gate Bridge)

SOILS AND LIQUEFACTION:

Qm Holocene estuarine muds: Unconsolidated water-saturated mud and artificial fill overlying bay mud, 0-40m thick, overlies Quaternary alluvium. (Liquefaction potential in this area is .276 + % (low).)

Qal Quaternary alluvium: Unconsolidated to weakly consolidated silt, sand, and gravel, 0-50m thick, generally overlies bedrock. (Liquefaction potential in this area is .010-.045% (very low).)

HISTORIC MARGIN OF THE BAY, 1850

Source: ADAG, Alameda County Flood Control and Water Conservation District; USGS MF-709, MF-480, Open File Reports.

which could be the southward extension of a probable fault concealed in the Bay west of Point Richmond, may exist concealed beneath the thick alluvial sediments.

Liquefaction. Liquefaction is the transformation of a granular material (such as sand) from a solid to a liquid state. In a solid state, sand grains are touching each other and the weight of overlying material (such as landfill) is supported by the sand. Ground shaking from an earthquake can cause the grains of sand to be forced apart momentarily, allowing underlying water to filter up and the granular material to lose its cohesiveness. Liquefaction potential, shown in Figure V-2, is primarily a function of soil type.

In Emeryville, the geologic materials most likely to liquefy are the water-saturated bay muds and their overlying fill.² If only the bay mud liquefies, buildings placed on top of the fill may experience differential settlement. If, in addition, the landfill liquefies, sand may flow from under buildings, causing them to collapse. Liquefaction potential is a function of earthquake magnitude, recurrence intervals, distance to active faults, and the likelihood of a soil type to be found in a liquid state. The likelihood of this occurrence is extremely low (less than 3%) due to the relative infrequency of earthquakes of sufficient magnitude to cause liquefaction.³

A study performed by Woodward-Clyde Consultants prior to construction of Pacific Park Plaza⁴ indicated that complete loss of soil strength in the artificial fill would not be likely except in some locally loose pockets of sand. The study also found that sands below the groundwater level could experience some failure during moderate to strong shaking, which could cause settling of pile foundations.

Slope Stability. The terrain within the City is flat, with slopes of less than 5%. Slope stability therefore does not represent a hazard, although the Bayfront area could be considered unstable because it is underlain by moist, unconsolidated bay

¹Blake, et al; 1974, cited in City of Emeryville General Plan Volume II, August 1975, p. 13.

²Mary Dresser, "Land Stability Along the East Bay Shoreline," in The East Bay Shoreline: Selected Environmental Issues, June 1982, p. 30; E. J. Helley, et al., Flatland Deposits of the San Francisco Bay Region, California: Their Geology and Engineering Properties, and Their Importance to Comprehensive Planning, Geological Survey Professional Paper 943, 1979, pp. 53, 55-56.

³Association of Bay Area Governments, Earthquake Hazards Mapping Project, Working Paper #4; Jeanne Perkins, Senior Regional Planner/Earthquake Program Manager, Association of Bay Area Governments, Oakland, California, November 13 and 20, 1984.

⁴Woodward-Clyde Consultants, Geotechnical Engineering Study, Final Design Report, East Bay Park Condominiums, Emeryville, California, June 1981.

mud that is subject to flowage. Lands east of the Bayfront area are considered stable since they are level and not underlain by landslide deposits.

Subsidence and Settlement. Subsidence is the gradual settling or sinking of an area with little or no horizontal motion. In the Bay Area, it is caused primarily by excessive groundwater or natural gas withdrawal.² The rate of subsidence is not significant in Emeryville and is of little concern in the Bay Area, except in the South Bay and the Delta.

Settlement is the gradual downward movement of an engineered structure (e.g., a building) due to the compaction of the unconsolidated material below the foundation. Three types of settlement can occur:

- pile settlement due to building loads;
- consolidation settlement in the layer of young bay mud; and
- seismically induced compaction settlement in artificial fill.

Artificial fill will settle over time, regardless of the quality and degree of compaction of the material. The amount of settlement depends on the compressibility of the mud, its depth, and the depth and density of the fill.³

Settlement can occur either uniformly or differentially. Uniform settlement in a building can create problems of poor drainage and potential failure of underground utility connections. Differential settlement can cause mechanical problems within a structure, although these can be minimized if the structural engineers are aware of the site conditions. For example, land which is subject to settlement can be surcharged before building or road construction; that is, a calculated load of temporary dirt fill can be placed on the soil for a predetermined period of time. This has the effect of forcing consolidation of the underlying soils.

Gradual long-term settlement can occur from consolidation of the bay mud by the weight of fill. Except for the tip of the Peninsula, which is used as a park, all fill in Emeryville has been in place for over 20 years. Most long-term settlement is therefore virtually complete. If, however, grades are raised by more than one foot due to

¹Tor H. Nilson, et al., Relative Slope Stability and Land Use Planning in the San Francisco Bay Region, California, Geological Survey Professional Paper 944, 1979.

²E. J. Helley, et al., Flatland Deposits of the San Francisco Bay Region, California: Their Geology and Engineering Properties, and Their Importance to Comprehensive Planning, Geological Survey Professional Paper 943, 1979, p. 45.

³Mary Dresser, "Land Stability Along the East Bay Shoreline," in The East Bay Shoreline: Selected Environmental Issues, June 1982, p. 34.

placement of new fills, additional consolidation settlement can be expected.¹ Moreover, earthquake shaking can produce settlement in addition to that caused by consolidation. A study by Woodward-Clyde Consultants indicates that settlement of 1.0 to 1.5 inches could be expected in the location of Pacific Park Plaza.²

Potential Effects of Seismic Activity

It is impossible, at the present time, to prevent, control, or accurately predict earthquakes. Since severe earthquakes will continue to occur, structures must be designed to withstand significant shaking without serious failure and the resultant injuries and loss of life. A severe earthquake may not result in disaster if buildings and cities are properly designed and a response network is adequately prepared.

There are several issues which must be studied to estimate the possible damage resulting from an earthquake. With this information, plans can be formulated to respond to that potential. Several variables must be considered: (1) the maximum likely ground shaking intensity (which would result from a maximum credible 7.3-magnitude earthquake on the Hayward fault, as previously discussed); (2) the structures which are likely to be occupied; (3) emergency response; and (4) effects on "lifelines" and the degree to which the City depends on them.

The San Fernando earthquake of 1971, which measured 6.3 on the Richter scale, provided an important opportunity to assess the damage to a modern urban environment from a major earthquake. An earthquake of this size is often thought of as a "moderate" earthquake; however, conditions such as surface faulting and hazardous soils conditions in this densely populated area intensified the damage. This earthquake resulted in 65 deaths and over \$500 million in property damage.³

The damage to one- and two-story wood-frame houses just a few blocks from the area of surface faulting was not great. Partial collapse occurred in split-level houses with large garages under the two-story sections. Unreinforced masonry buildings were severely damaged. Broken utilities did not represent a significant hazard, but freeway overpasses and road surfaces experienced major damage.⁴

The Mexico City earthquake of September 1985 (8.1 on the Richter scale) will also provide some valuable information on earthquake preparation and response. It is currently estimated that as many as 23,000 people lost their lives in this earthquake; another 30,000 were injured, and 300,000 were left homeless. Over 7,000 structures

¹Derived from Woodward-Clyde Consultants, Geotechnical Engineering Study, Final Design Report, East Bay Park Condominiums, Emeryville, California, June 1981, p. 13.

²Woodward-Clyde Consultants, Geotechnical Engineering Study, Final Design Report, East Bay Park Condominiums, Emeryville, California, June 1981.

³B. A. Bolt, et al., Geological Hazards: Earthquakes-Tsunamis-Volcanoes-Avalanches-Landslides-Floods, New York: Springer-Verlag, 1977 revised, 2nd edition, p. 39.

⁴Ibid, pp. 41-42.

were damaged; 265 collapsed, and nearly 1,000 will have to be demolished as a result of severe damage. Estimates of the cost of damage range from \$4 to \$10 billion.¹

Although the soil conditions in Mexico City are different than those in Emeryville (Mexico City lies on an ancient lakebed of soft sedimentary clay soils), the amount of shaking that was experienced could be expected in the Bay Area. In addition, although less than 1% of all buildings suffered any damage, many of the buildings which were damaged were built to modern seismic code requirements. In fact, due to the unusual characteristics of the ground motion, the buildings that suffered major damage were primarily mid-rise reinforced concrete structures. Many reinforced masonry buildings also were damaged. It has been determined that the ground motion period corresponded with the natural frequency of buildings in the height range of eight to fourteen stories, accounting in part for the large number of such buildings that collapsed.² Furthermore, the long duration of the earthquake (80 to 110 seconds)³ exacerbated the damage. Surprisingly, many masonry buildings did not suffer major damage, not due to their strength but primarily because the ground motion did not correspond with the natural frequency of those buildings. Preliminary reconnaissance of the damage in Mexico City indicated that structural damage commonly occurred under the following conditions:⁴

- building elements, such as roofs and foundations, which were not adequately joined;
- older buildings which could have suffered undetected damage from previous strong earthquakes;
- non-symmetrical building configurations and stiffness;
- inadequate separation between buildings, allowing tall, flexible buildings to strike lower, stiffer buildings;
- inadequate design, construction, and maintenance of structures;
- older, inflexible reinforced concrete buildings; and
- steel-frame structures of a height (8-14 stories) which corresponded to the frequency of the ground motion.

¹Bay Area Regional Earthquake Preparedness Project, Networks Earthquake Preparedness News, The Mexico City Earthquake of September 19, 1985: Lessons for the Bay Area, February 1986.

²Harry Seidler, "Mexico City Earthquake," The Times Council on Tall Buildings and Urban Habitat, vol. 15, no. 2, November 1985.

³Ibid.

⁴Bay Area Regional Earthquake Preparedness Project, Networks Earthquake Preparedness News, The Mexico City Earthquake of September 19, 1985: Lessons for the Bay Area, February 1986.

Definitive determinations of the causes of building damage or collapse, and the responses of individual buildings, await further detailed study and documentation.

Most residences in the eastern portion of Emeryville are one- and two-story wood-frame structures, and are not likely to suffer great damage other than collapse of chimneys during a major earthquake. West of the main railroad line in the Bayfront and Peninsula, the high-rise Pacific Park Plaza and the 3-story Watergate complex contain the only residences. Both complexes could experience violent shaking, as previously mentioned, due to the relatively unstable soils underlying them. The 30-story condominium tower is built on pile foundations and theoretically should not suffer major damage, although utility lines could rupture.

Unreinforced masonry industrial and commercial buildings exist in many parts of the City. These structures could collapse in the western portions of the City, and could experience significant damage or collapse in areas where shaking would be slightly less severe. New structures are subject to building codes which include seismic safety measures. Small steel-frame buildings generally are the safest non-residential structures, and concrete tilt-ups pose a slightly greater risk. Residential and non-residential buildings with large amounts of glass or homes which are not adequately tied to their foundations could experience severe damage. In addition, windows and non-structural parts of buildings such as glass and unreinforced chimneys or ornamental features may fall from buildings and injure pedestrians. Generally, a building can be considered hazardous in the event of an earthquake if it possesses any of the following characteristics:

- Construction prior to adoption and enforcement of building codes requiring seismic safety measures;
- Construction of unreinforced masonry;
- Construction which cannot resist lateral forces;
- Exterior parapets and ornamentation that may fall on pedestrians; and
- Large openings in walls that may not be able to resist torsional forces.

Additional information on the hazards presented by certain building types and configurations may become available as a result of the Mexico City earthquake.

The time of the earthquake occurrence and the efficiency of Emeryville's and the region's emergency response system will have a great effect on the amount of damage the City and its residents could suffer (see Emergency Preparedness Element). An earthquake that occurs in the middle of the day or during the commute period could cause the most damage because of widespread confusion and attempts by individuals to contact family members, thus clogging communication lines and roadways. Damage to lifelines, such as freeways and local roads, water and power distribution systems, wastewater treatment systems, conveyance systems and communication lines can be expected. This damage could last from 36 to 72 hours or

¹Hazardous Buildings Committee, California Seismic Safety Commission, Hazardous Buildings: Local Programs to Improve Life Safety, SSC 79-03, March 8, 1979, p. 21.

more;¹ therefore, it is essential for each household to set aside emergency supplies of food and water for at least a 3-day period.

The Mexico City earthquake occurred just after 7:00 a.m. Primarily due to extensive use of bottled gas, the fires which followed were fairly localized. This would probably not be the case in Emeryville. Power generation and distribution facilities were not badly damaged, but water supply was cut off due to a damaged distribution pipelines. Telephone service was cut off following equipment damage and loss of personnel when a telephone company building partially collapsed.

It is not possible to completely avoid damage from a major earthquake. The buildings which must be able to withstand major damage and recover quickly are those housing essential services. These are called "critical structures" and they include police and fire stations and emergency health care facilities. Damage can be minimized if these facilities remain functional following a major disaster.

¹ California Division of Mines and Geology, Earthquake Planning Scenario for a Magnitude 8.3 Earthquake on the San Andreas Fault in the San Francisco Bay Area, Special Publication 61, 1982.

C. FLOOD HAZARDS

Introduction

Consideration of water-related hazards is required by several sections of State planning law. Specifically, plans for flood control and appraisals of potential tsunami inundation must be addressed under the provisions for a conservation element (Government Code Section 65302(d)) and a safety element (Government Code Section 65302(g)).

Flooding may occur in Emeryville as a result of: storm-induced flooding, tsunamis, and inundation from dam failure. The actual potential for flood damage, however, is minimal, as described below.

Storm-Induced Flooding. Temescal Creek, which flows through the City from Lake Temescal in the East Bay hills to the Bay, is the major surface drainage-way in Emeryville. Prior to 1963, periodic flooding and erosion occurred along the creek, culminating with the floods of October 1962, which resulted in extensive property damage. The floodplain of Temescal Creek was then incorporated into Alameda County Flood Zone 12, and the 100-year flood level was contained by constructing a deeper, wider concrete channel.¹

Emeryville participates in the National Flood Insurance Administration program, which provides federally subsidized insurance and loans to property owners against losses due to flooding. As a condition for receiving this insurance, communities must develop Flood Insurance Rate maps showing flood risk zones, and develop and implement flood plain regulations.² In 1976, the Emeryville maps were rescinded because studies indicated that the City does not face a significant flood hazard. Emeryville has participated in the program without maps since that time. Subsidized flood insurance is optionally available; it could become mandatory if future studies indicate a high flood hazard potential in the City.³

Tsunamis. Tsunamis, often incorrectly referred to as tidal waves, are caused by submarine seismic or volcanic disturbances. The waves increase in size with the distance traveled. The U.S. Geological Survey estimates that a 20-foot wave at the Golden Gate Bridge (an event that is estimated to be possible once every 200 years) could potentially cause runup of a 10-foot wave in the Emeryville Peninsula and

¹City of Emeryville, Final Environmental Impact Report on the Amended Redevelopment Plan, August 1983, p. 128.

²Bill Brick, Chief of Water Resources Branch, Army Corps of Engineers, November 29, 1984.

³Ray Lenaburg, Civil Engineer, Federal Emergency Management Agency, November 29, 1984.

shoreline area¹ (see Figure V-3). It should be emphasized that the occurrence of a 20-foot wave, although possible, is highly unlikely; during the period 1868-1968, 19 tsunamis² were recorded at the Golden Gate tide gauge and the maximum height was 7.4 feet.²

Dam Failure. Following significant seismic activity, the dam at Lake Temescal could fail, causing Temescal Creek to overflow its banks. Within 15 minutes, an area nearly 1,000 feet on either side of the creek in the Triangle area would be inundated, and within 25 minutes, the water could reach the rest of the City west toward the Bay and north approximately to Powell Street.³ This is illustrated in Figure V-3. The likelihood of this flood hazard is dependent upon the occurrence of a major earthquake and the ability of the dam to withstand seismic activity. An engineering analysis would be required to assess the strength of seismic shaking that would likely impact the dam.

Engineering techniques for erosion control which mimic the natural environment, such as wattling (vegetative erosion control), bank terracing, check dams, or temporary retention areas, if properly designed, have the effect of stabilizing the stream course, and possibly increasing its stormwater holding capacity, while retaining the character of a natural waterway. Conventional channel improvements, on the other hand, by straightening the course and not allowing surface percolation, have the effect of intensifying the stormwater flows and therefore destabilizing the drainage system. For this reason, such improvements are usually "over-designed," huge concrete ditches which tend to convey an image of urban blight.

¹J. R. Ritter and W. R. Dupre, Map Showing Areas of Potential Inundation by Tsunamis in the San Francisco Bay Region, California, U.S. Geological Survey Miscellaneous Field Studies Map MF-480, 1973.

²Ibid.

³Rubin Nino, Alameda County Flood Control and Water Conservation District, November 16, 1984.



Figure V-3
FLOOD HAZARDS

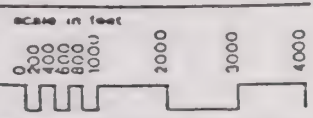
SOURCE: Ritter and Dupre, Maps Showing Areas of Potential Inundation by Tsunamis, 1972; Alameda County Flood Control and Water Conservation District, 1973.

 TSUNAMI INUNDATION
  DAM INUNDATION (LAKE TEMESCAL)

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D. NOISE

Introduction

Noise is unwanted sound. People can tolerate or ignore most noise, but beyond certain limits it can be both annoying and physically harmful. The Noise Element of the General Plan seeks to protect the citizens of Emeryville from excessive noise exposure. It describes the community noise environment and provides a basis for comprehensive local programs to control and abate environmental noise where it is deemed harmful to public health.

The Noise Element is most closely related to the Land Use, Housing, Circulation and Pacific Facilities Elements. As required in Section 65302(1) of the Government Code, the Noise Element is to be used as a guideline in the development of compatible land uses. The Housing Element concerns the provision of a decent living environment for Emeryville residents, which should include protection from excessive noise. Noise can influence the location and cost of housing.

Since vehicles are major noise sources, the Circulation Element is a primary determinant of noise compatibility. The Public Facilities Element influences and is influenced by the Noise Element: excessive noise can adversely affect the enjoyment of outdoor open space and recreation activities. Conversely, open space can serve as a buffer between noise sources and sensitive receptors.

Effects of Noise on People

Noise is a pollutant which adversely affects all people in an urbanized environment at some point in time. The degree to which its effects are serious depends on the tolerance of the individuals in the community, the types of activities taking place, and the characteristics of the noise. Noise can disrupt activities that involve speech or listening, and it can cause distraction, stress and irritation. In many situations, the effects are subjective and noise may not be identified as the problem if the individual is not conscious of it. Prolonged exposure to intense noise can result in physiological effects such as temporary or permanent hearing loss.¹

The task of creating an acceptable noise environment is difficult because it affects each person differently. An important parameter in determining a person's subjective reaction to noise is the environment to which he or she is adapted. "Ambient" noise is a composite of all noise sources, near and far, which constitute the normal or existing level of environmental noise at a given location. In general, the more a noise exceeds the ambient noise, the more intrusive and less acceptable the noise is to the community. The relative intrusiveness of noise also depends on the level of the sound, its tonal quality, duration, frequency and time of occurrence.²

Noise becomes more intrusive if it occurs intermittently or if the sound levels undulate. Noise which is constant is usually less irritating; people become less aware of it over time. Noise which occurs during periods of quiet, such as in the evening when most people are resting or engaged in talking, resting, listening to the radio or watching television, is more intrusive than noise which occurs in the middle of the day. Similarly, noise which occurs in the vicinity of sensitive noise receptors—residential areas, schools, hospitals, and churches—is less tolerable than noise which occurs in a busy industrial area or adjacent to a freeway.

¹For more information see U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Toward a National Strategy for Noise Control, April 1977.

²California Department of Health, Office of Noise Control, Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976, p. 4.

TABLE V-2: TYPICAL SOUND LEVELS FOR COMMON NOISE SOURCES

<u>QUALITY OF SOUND</u>	<u>SOUND LEVEL, dBA</u>	<u>TYPICAL SOUNDS</u>
UNCOMFORTABLY LOUD (THRESHOLD OF PAIN)	130	
	120	Jet takeoff at 200 feet Thunder
	110	
VERY LOUD	100	Rock band
	90	Power lawn mower Diesel bus at 15 feet Motorcycle at 25 feet
	80	Inside sports car, 55 mph Garbage disposal at 3 feet
	70	Freeway traffic at 50 feet
LOUD	60	Vacuum cleaner at 10 feet Inside department store
	50	Normal conversation Quiet street
	40	Average residence Quiet room
VERY QUIET	30	
	20	Whisper at 5 feet
BARELY AUDIBLE	10	Leaves rustling
THRESHOLD OF HEARING	0	Mosquito at 3 feet

Source: City of Emeryville General Plan, Vol. 2, 1975; Charles M. Salter Associates, 1985; U.S. Environmental Protection Agency, Fundamentals of Noise: Measurement, Rating Schemes, and Standards, December 1971, p. 29; SCA.

Measuring Noise

Sound is measured in decibels (dB), which describe relative levels of sound intensity. The decibel scale is logarithmic; 20 dB is 10 times louder than 10 dB, and 30 dB is 10 times louder than 20 dB (100 times louder than 10 dB). Because the human ear does not hear low- and high-frequency sounds (the quietest and loudest sounds, respectively) as well as those in the mid-range, a scale has been devised to describe dB sound measurements according to the response of the human ear. The scale that best approximates this response is the A-weighted scale, called the "A-scale," and measurements using this weighting system are expressed as dBA.

As shown in Table V-2, normal everyday sounds range from 30 dBA, which is very quiet, to almost 100 dBA, which is very noisy. Although noise levels above 60 dBA can disrupt some activities, most people do not become annoyed by it at this level. Above 70 dBA, noise becomes a significant adverse aspect of the environment; speech is disrupted and irritation is a widespread response. When noise levels reach 75 dBA and above, some hearing loss may begin to occur and noise is likely to be identified as the major source of annoyance by the community.

The amount of noise heard in an environment varies over time: trucks may pass by only in the morning; a steady hum may be heard from a freeway or from a creek; a dog may bark intermittently. A number of different descriptors are used to characterize noise according to these time variances and the differences in people's responses to daytime and nighttime noises.

California law requires the use of either the Ldn (day-night average level) or the CNEL (community noise equivalent level) to describe the community noise environment. Both descriptors adjust measurements upward for periods when the community would be more sensitive to noise. The Ldn descriptor separates the day into daytime and nighttime periods, adjusting measured noise upward during nighttime periods. The CNEL accounts for a daytime, evening, and nighttime period and similarly adjusts evening and night noise. These two noise descriptors are very similar, and for all practical purposes the measurements obtained from the two systems are the same. The Emeryville General Plan uses the Ldn measurement system. The national trend is toward the use of this descriptor, and it is recommended by the EPA.

Existing Noise Environment

Most of Emeryville is relatively noisy. Major noise sources fall into two categories: vehicular and non-vehicular sources. Vehicular sources include rail operations, some aircraft flybys, and motor vehicles on the freeways and local streets. Non-vehicular sources are primarily stationary, namely the industrial operations west of Hollis Street and in the vicinity of San Pablo Avenue. The eastern portion of the City is significantly quieter than the western portion, as the western portion of the City is closer to major freeway noise sources and contains more industrial land uses and more traffic. However, there are several industrial operations in the eastern portion of the City, and some truck traffic passes through the residential areas east of San Pablo Avenue. Airplane flyovers are another noise source but are not pervasive enough to alter the ambient noise environment.

¹ Federal Inter-agency Committee on Urban Noise, Guidelines for Considering Noise in Land Use Planning and Control, June 1980, Appendix D.

The community is relatively tolerant of urban noise. Outside of occasional residential problems (such as parties or barking dogs) or isolated events, formal complaints are limited. Some residents have voiced concerns about the truck traffic and nighttime industrial operations in the predominantly residential areas east of Hollis Street.

Most noise in Emeryville originates from major vehicle circulation routes: I-80 and I-580 freeways and Powell Street, with Hollis Street and San Pablo Avenue slightly less noisy. Noise levels drop significantly as distance from roadways increases, not only because the distance dissipates noise, but also because the buildings along the roadways provide effective noise shielding for uses which are behind them. A noise monitoring program, conducted as part of the comprehensive planning effort, measured noise levels from 16 different locations in the City. The monitoring sites were selected to represent a variety of environments and exposure to the spectrum of potential noise sources—automobiles, trains, industrial operations, etc. The noise measurements taken in 1985, as shown in Figure V-4, indicate that noise levels in residential areas of Emeryville range from approximately 55-60 dBA Ldn in parts of central Emeryville equidistant from Powell Street, Hollis Street, and San Pablo Avenue; to 60-65 dBA Ldn in the Triangle near San Pablo Avenue and in the vicinity of Watergate on the Peninsula. Predominantly industrial and commercial areas of southern Emeryville near Park Avenue, Yerba Buena Avenue and Hollis Street and most of the northern area between Hollis and Bay Streets commonly experience noise levels of 65-70 dBA Ldn. Much of the Bayfront ranges from 70 to 75 dBA Ldn. Appendix G describes the observations and measurements made at each of the monitoring sites.

Table V-3 describes typical noise levels from community environments. Noise levels in Emeryville vary by location, but most of the City can be characterized as a noisy urban environment, meaning that the ambient noise levels are relatively high. The Office of Noise Control in the California Department of Health Services suggests that residents of this type of community may be more tolerant of noise than those in quieter communities, and recommends less stringent noise controls relative to the community's tolerance. Noise controls should be re-evaluated periodically, as new information becomes available.

Future Noise Environment

The policies of the Land Use, Housing, Circulation and Noise Elements will define the future noise environment. Noise sources will remain largely unchanged as a result of the new land uses, although many industrial sources will be removed, lowering noise from stationary sources. Increased traffic within the City and in nearby communities will result in increased circulation noise levels. The future noise contours shown on Figure V-4 for the Bayfront are based on projected citywide traffic levels and anticipated train operations. The Bayfront will remain the noisiest area in the City, with Ldn levels reaching 70-80 dBA.

TABLE V-3: RANGE OF TYPICAL OUTDOOR NOISE ENVIRONMENTS, L_{dn}

<u>Type of Environment</u>	<u>Day-Night Sound Level, dBA</u>	<u>Typical Locations</u>
	85	Los Angeles, 3rd floor apartment balcony next to Santa Monica freeway
	80	Los Angeles downtown with some construction activity
Downtown Major Metropolis	75	San Francisco high-density downtown residential
Very Noisy	70	San Francisco medium- to high-density residential near downtown
Noisy Urban	65	*Emeryville (approximate, varies with location)
Urban	60	Santa Clara Valley residential
Suburban	55	Berkeley Hills low-density residential
Small Town/Quiet Suburban	50	Portola Valley wooded residential
Rural	45	Salinas Valley tomato field on farm

Source: California Department of Health, Office of Noise Control, Guidelines for the Preparation and Content of Noise Elements of the General Plan, 1976; SCA.

*The California Department of Health, Office of Noise Control, suggests that noisy urban communities are more tolerant of noise than quieter communities, and recommends that measured noise levels be adjusted downward to correct for this tolerance.

V-24

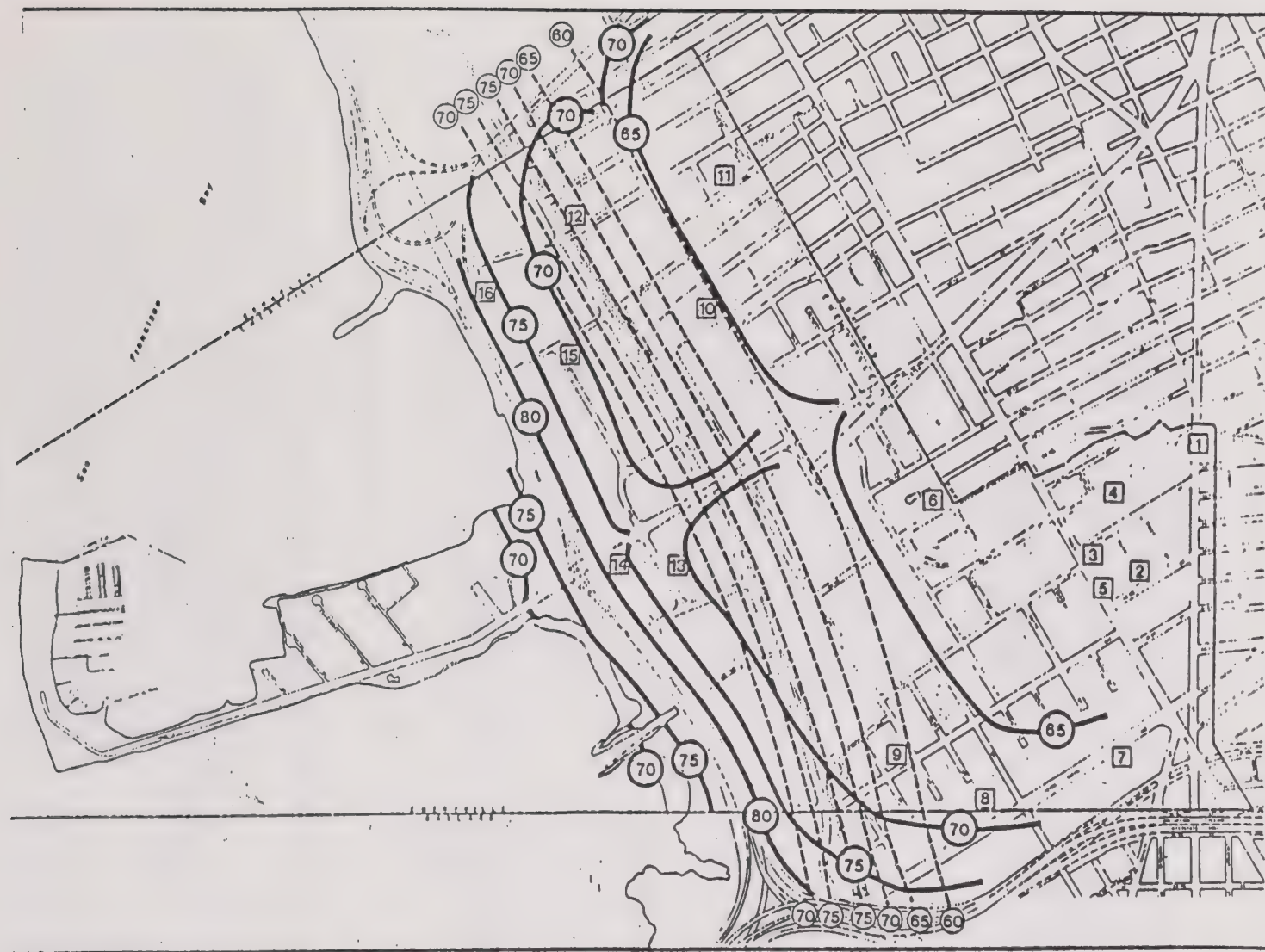


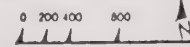
FIGURE V-4
FUTURE NOISE CONTOURS
(Ldn) AND 1985
MEASUREMENT LOCATIONS

70 — SURFACE ROAD NOISE LEVELS, dBA
75 — RAILROAD NOISE LEVELS, dBA

1985 NOISE MEASUREMENTS:

Location	Noise Sources	Measured Ldn (dBA)
1 Wander Bread Plant	lane (50-53 dBA); distant traffic	64*
2 43rd/Salem	traffic (up to 80 dBA)	64
3 43rd/San Pablo-Essex	traffic (59-69 dBA)	58
4 47th/Salem-Essex	traffic (58-72 dBA)	57
5 San Pablo/43rd-Park	traffic (65-76 dBA)	64
6 53rd/Dwyer	traffic; school playground	61
7 Yerba Buena/Hollis-San Pablo	freeway traffic	67
8 I-580	freeway traffic	68
9 Park/Martin-Hubbard	auto (60 dBA); truck (80 dBA) traffic; distant industrial activity	65
10 Hollis/62nd-63rd	truck traffic (70-84 dBA)	70
11 Liquid Sugar Industries	traffic; industrial activity (50 dBA)	56*
12 Bay/65th-66th	traffic; railroad	66
13 Pfizer Chemical	traffic (71 dBA); industrial activity (60 dBA)	71*
14 Powell/Christie	freeway traffic (80-82 dBA); industrial activity	74
15 64th/Christie	traffic (62-77 dBA)	68
16 I-80	freeway traffic (24-hour measurement)	80

*15-minute Leq; may be slightly lower (0-3 dBA) than Ldn.



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Note: Where surface road and railroad noise contours overlap, the combined noise level heard by the receptor is greater than the noise level from either source alone. When two sources which individually generate equal noise levels are combined, the resulting noise level is 3 dBA greater than the individual noise source. For

example, a receptor in the Bayfront exposed to 70 dBA from traffic and 70 dBA from trains would hear 73 dBA. Where the sound level difference between two noise sources is 5 dBA, the receptor hears a 1 dB increase over the louder sound.

TABLE V-4: NOISE/LAND USE COMPATIBILITY

LAND USE CATEGORY	RECOMMENDED NOISE LEVELS, L _{dn} (dBA)						
	EXTERIOR RANGE						INTERIOR, MAX.
	50	55	60	65	70	75	
Residential:							
Low Density							45
Medium to High Density							45
Commercial:							
Hotel							50
Office							55
Restaurant, Retail							60
Other							65
Industrial:							
Light Industrial							55
Custom Manufacturing							50 living area
Other							70
Public/Quasi-Public:							
School, Library, Church,							
Hospital, Theater							45
Other							55
Open Space:							
All Categories							

KEY:



NORMALLY ACCEPTABLE

Specified land use is acceptable, assuming standard building construction.



CONDITIONALLY ACCEPTABLE

Standard building construction is not adequate for specified land use; however, mitigation measures may be easily employed to reduce noise to acceptable levels. An analysis of the measures by a qualified acoustical professional is required, to be approved by the City.



NORMALLY UNACCEPTABLE

The specified land use should be discouraged unless the City finds the project to be in the public interest and a detailed analysis by a qualified acoustical professional shows that specific measures which are to be included in the project would reduce indoor and outdoor noise to acceptable levels. The analysis and attenuation measures must be approved by the City.

E. HAZARDOUS MATERIALS

Introduction

Hazardous materials were used in much of Emeryville's industrial past, and they are a significant part of Emeryville's present environment. The cleanup of hazardous wastes from the past and the handling and disposal of newly generated wastes will affect people many generations from now. Site contamination may impair the City's ability to implement this Plan by increasing the costs of development, requiring certain land use restrictions, and causing delays while necessary cleanups are implemented. The City recognized the importance of this issue in its decision to include it as a separate element in this General Plan. This element primarily addresses land use compatibility where properties are known to be contaminated or where hazardous substances are used or stored on a property. Accidents involving hazardous materials are discussed in the Emergency Preparedness Element.

Hazardous materials include all flammable, reactive, corrosive, or toxic substances which, because of these properties, possess the potential to bring harm to the public or the environment.¹ Hazardous materials can be distinguished from hazardous wastes: hazardous wastes² generally are hazardous materials which have been disposed of—properly or improperly, intentionally or unintentionally. Hazardous wastes are generated primarily by industrial activities, but domestic users also are generators: cleaners, paints, and pesticides, for example, are all hazardous, as is stormwater runoff when it contains oil from the streets.

Hazardous materials represent a potential threat to those who are working with the materials and those who could be affected by its improper or accidental disposal. This element discusses the management of hazardous materials and wastes, but does not discuss response to accidents. The transportation and the accidental discharge of hazardous wastes are discussed in the Emergency Preparedness Element.

¹ Air pollutants are discussed under the Air Quality Element in the Environmental Resources component of the Plan.

² Regulatory definitions of hazardous wastes are found in Subtitle C of the Resource Conservation and Recovery Act (40 CFR, parts 260, et seq.) and in the California Health and Safety Code, Sections 25110, et seq.

Agency Responsibility

Many State, Federal and regional agencies regulate hazardous materials under several legislative acts (see Appendix H). The Environmental Protection Agency (EPA) possesses broad regulatory authority over all aspects of hazardous materials generation, use and disposal, including the Superfund program to clean up inactive or abandoned sites. The California Department of Health Services (DOHS) plays a similar role as the EPA, but on a statewide level. Protection of water quality is the responsibility of the Bay Area Regional Water Quality Control Board (RWQCB). Other agencies, such as the Bay Area Air Quality Management District and East Bay Municipal Utility District, have minor roles addressing hazardous substance issues. The resources of these agencies are limited, however, and cannot be relied upon for implementation of all the policies set forth in this element. Further, these agencies can have goals and priorities that differ from those of the City.

Hazardous Waste Sites in Emeryville

Six sites in Emeryville contain evidence of hazardous waste soil and/or groundwater contamination:

- Westinghouse (Peladeau Street);
- ITT Grinnell (Hollis Street);
- Chevron (Powell Street);
- Electro-Coatings (Park Avenue);
- Emeryville Marketplace (Shellmound Street); and
- Delta-Garrett trucking terminal (64th Street).

These sites have been designated by State and Federal agencies for study and mitigation of possible public health effects. Westinghouse and ITT Grinnell have been designated as Hazardous Waste Properties by the DOHS,¹ which means that DOHS can impose land use restrictions if hazardous conditions are not mitigated. Westinghouse and Electro-Coatings also have been designated as "uncontrolled hazardous waste disposal sites" on the state Superfund list, giving them priority for cleanup.²

Abatement of the hazardous wastes present on the sites involves determination of the nature and extent of contamination, determination of responsibility, inter-agency coordination, and development of a cleanup or containment plan. Cleanup activity at one site in Emeryville (ITT Grinnell) has been postponed indefinitely, partially due to an inadequate determination of agency responsibility, tightened budgets, and misinterpreted communications between agencies.

In addition to these known hazardous waste sites, contamination may exist on other formerly industrial sites. Records of previous activities usually do not document use

¹ Lloyd A. Batham III, Program Manager, Hazardous Waste Property Evaluation Unit, Hazardous Materials Management Section, California Department of Health Services. Letter to Mark Buell, Emeryville City Planning Department, April 10, 1984.

² Association of Bay Area Governments, Hazardous Waste Management: A Guide for Community Involvement in the San Francisco Bay Area, September 1983.

of hazardous materials; however, activities such as rail transportation, paint products manufacturing, metal plating, and transformer work may have resulted in site contamination.

The City is contemplating the acquisition of property interests in current and former industrial land within the City in connection with the implementation of this and other land use plans. Since the precise scope of site contamination within the City limits is unknown, such acquisitions carry with them a potential risk of liability under the federal and state Superfund laws. If the City were to acquire contaminated property requiring cleanup activities, costs of those activities theoretically could be imposed upon the City under these laws, although the EPA and DOHS usually pursue such cost recovery against those parties responsible for creating the contamination problem.

Use and Storage of Hazardous Materials

Hazardous materials currently are used in industrial operations by several companies in the Bayfront. The storage of these materials is identified locally by the fire department, which conducts an annual inspection of all businesses in the City. The Alameda County Health Department is developing a program to annually inspect businesses which handle or generate hazardous wastes, based on information from the fire marshals of each city and on a determination of business types which are likely generators. This program eventually will include a waste exchange (recycling) program, to encourage the recycling of hazardous wastes in accordance with RCRA standards.² DOHS also maintains a hazardous materials exchange. The City intends to participate in these programs. These inspection programs will serve as a future record of potential hazardous wastes, and will facilitate emergency response in case of accidents.³

The Sher Bill (Health and Safety Code Sections 25280-25289) regulates the storage of hazardous liquids in underground tanks. Under that bill, counties are to implement the LUST program pursuant to regulations adopted by the State. Cities are allowed to assume implementation of the program by ordinance, but an amendment to the Sher Bill directed that assumption to take place by January 1, 1986. Although local regulations conflicting with the state program are preempted, the savings provision of the bill preserves the authority of cities to adopt ordinances requiring information, conducting investigations and inspections, or implementing and enforcing the LUST program. Generally, the program requires that all facilities storing hazardous substances in underground tanks have a permit, and that the storage tanks meet minimum technological standards.

Under the federal Superfund law, land owners having information that their property was contaminated were required in 1981 to notify the EPA of the existence of the contaminated site. The California Department of Health Services also has attempted to inventory the existing hazardous waste sites within the State. The City should request from these agencies the available information concerning known sites within the City of Emeryville, including but not limited to those sites on the State Superfund list. This information will serve as the basis for additional site characterization activities as necessary.

¹Bill Burke, Building Inspector, City of Emeryville, November 27, 1984.

²Ed Howell, Hazardous Materials Specialist, Alameda County Health Department Division of Environmental Health, December 10, 1985.

³Emergency response is discussed in a separate element of the Plan.

F. FIRE AND CRIME

Introduction

Fire and crime are common safety problems in an urban environment, largely caused by and avoidable through human action. The degree to which they represent a threat depends upon the incidents which occur, the organization of the community, and the facilities and services available in the City. Thus, this element is directly related to several other General Plan Elements; namely, Emergency Preparedness, Community Design, Land Use, Circulation, and Public Facilities.

This element deals primarily with general and project-specific fire and crime prevention while the Emergency Preparedness Element primarily focuses on the response to these hazards, by themselves and in conjunction with other public safety hazards. The Land Use and Community Design Elements describe principles of appropriate community design and site layout for fire and crime prevention and response. Provision of firefighting and police services and facilities are discussed in the Public Facilities Element. Traffic and road conditions which affect emergency vehicle access are discussed in the Circulation Element.

Fire

Fires are caused by people, either intentionally or through carelessness and error. Most fires can be prevented by appropriate site and building design, proper handling and storage of flammable materials, and careful human action. The Uniform Fire Code, which Emeryville has adopted, describes building standards which help to prevent structure-related fires. Some buildings in the City which were completed prior to adoption of these standards do not meet current codes. While most of these buildings do not represent a significant public safety risk, suppressing fires in some may prove extremely difficult, particularly in unsprinklered high-rises.

Planning and prevention, or pro-active firefighting, are probably the best protections against fire hazards. Even with careful planning, however, fires are not entirely preventable. At the point when a fire ignites, firefighting becomes reactive. An adequate supply of water, good access to the source of the flames, and a quick response from the firefighting team help to assure that the fire will be suppressed before the damage becomes too widespread.

Crime

Crime and fear of crime can represent a serious threat to the City. If neglected, it can devastate a neighborhood, ultimately affecting all activities in the neighborhood and undermining public and private development or improvement efforts.¹ Crime is generally believed to be caused by social problems such as the absence of a proper home environment, the lack of job opportunities or class and racial discrimination. While the General Plan addresses these problems by outlining policies to guide development in a socially and economically cohesive form, the complete eradication of crime is beyond the Plan's power and scope.

Traditional municipal responses to crime involve investigation, arrest and punishment. Yet fighting crime should not rely solely on reactionary activities. Crime occurs primarily when an opportunity is presented: an unlocked door in an unoccupied house, for example. The City can attempt to prevent crime by reducing the opportunities for it to occur. Community members can assist in crime prevention by increasing their own understanding of crime and by fostering a sense of responsibility for their environments.

The layout of sites and buildings and the way they are used both play a significant role in the prevention of crime. A community can prevent criminal activities through the use of "defensible space." In short, this concept involves encouraging an increased sense of territoriality among residents and increased surveillance of common areas by residents through design and land use.

¹ Richard A. Gardiner, Design for Safe Neighborhoods: The Environmental Security Planning and Design Process. Washington: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice, September 1978.

G. EMERGENCY PREPAREDNESS

Introduction

An emergency is a life-, property-, or environment-threatening incident, particularly one which occurs suddenly or unexpectedly. The resulting damage is determined by the nature of the incident and the response to it. In severe disasters, the reaction to an emergency is often the major determinant of the severity of its impact, since mass confusion can cause more damage than the emergency itself. The purpose of this element is to minimize threats to public safety by preparing the City to respond adequately to potential emergencies.

Natural and man-made hazards that threaten Emeryville are described throughout the elements of the Public Health and Safety component of the General Plan. The Emergency Preparedness Element deals with generalized preparation for and reaction to geotechnical and flooding emergencies, hazardous materials accidents, fires and crime. Emergencies may occur individually or in combination with others. Although these hazards vary in degree of predictability, suddenness and severity, the response, in a greatly simplified form, is often similar:

- Search and rescue, treatment and/or evacuation of victims, and
- Assessment and repair of physical damage.

As an emergency increases in complexity, so does the response to it. For example, responding to a single-alarm fire at an empty warehouse is a much simpler task than clearing a freeway after a collision in which one of the vehicles carried hazardous or flammable substances. Even together, however, these two emergencies are much less serious than a regional emergency, such as a major earthquake on the San Andreas or Hayward Fault.

Emergencies which affect a wide geographical area, several different public agencies, or a large number of people present the most complicated response problems. The more demand the incident places on "critical facilities" and "lifelines"—hospitals, police and fire departments, transportation routes and utilities—the more difficult a coordinated and orderly response becomes. The adverse impacts of an emergency can be lessened if agencies and individuals respond in a comprehensive, rational fashion. The assurance of a rational response requires thorough preparation so that all people understand what to expect in emergency situations.

Fire and Crime. A quick response to fire and crime emergencies is determined by the street layout, traffic conditions, and the location of the responding agency relative to the site of the emergency. Although calls for police services in Emeryville are generally responded to by officers on patrol, the police station, in its current location on the Peninsula, is severed from the substantial portion of the City and the origination points of most calls. Service from the station to the eastern portion of the City, where most calls originate, is impeded by this poor access. Response from the two fire stations is generally good, except that traffic congestion in the vicinity of the Powell Street freeway interchange has slowed response times enough to require installation of a light-locking system on Powell Street. This allows the responding vehicle to hold the traffic lights, clearing the street of traffic. Fighting fires which could result from a major earthquake would be an extremely complex task, and is discussed in the section on Flood and Geotechnical Hazards.

Hazardous Materials. Several types of emergencies involving hazardous materials are conceivable. Among the possibilities are the following:

- A spill at a business, endangering the employees of the site and/or adjacent properties.
- A freeway accident involving vehicles carrying hazardous or flammable materials.
- An accident on the main Southern Pacific Railway line involving cars which are carrying hazardous materials.
- A local street collision involving trucks making a delivery to a gas station or business which uses hazardous substances.
- An accident at the wastewater treatment plant in Oakland involving chlorine gas.
- An unknown substance found on a local street.
- A break in the Southern Pacific petroleum pipeline.

As illustrated by the above examples, a hazardous materials emergency can involve either transportation or on-site accidents, accidents which may affect a wide or unknown range, and identification of unknown substances. Protecting people from hazards may involve evacuation, rerouting of traffic, emergency medical treatment, and identification and removal of the substance. In addition, since many hazardous materials are also flammable, emergency response may involve firefighting.

Prior to enactment of environmental protection laws, cleanup consisted of simply washing the substance, whatever it was, into the sewer system. It is now obvious that this response is not appropriate, and as our understanding of the problems has become more sophisticated, cleanup of spills has become increasingly complex and costly. State and Federal "Superfund" programs provide some monetary assistance for cleanup, and the Alameda County Hazmat teams can identify substances and provide technical advice and supervision for cleanup procedures.

Flood and Geotechnical Hazards. Storm flooding has a very low probability of occurrence in Emeryville. The likelihood of a flood emergency resulting from seismic activity is also relatively low. Some warning could be expected prior to any flood hazard; however, the amount of warning time may be minimal. In the case of dam failure, the warning would reach Emeryville no sooner than 15-25 minutes before the water reaches the City.

A significant earthquake along one of the major Bay Area faults could result in catastrophe for Emeryville. The earthquake by itself could cause major damage to buildings, roads, and utility lines. Combined with the potential for flooding, fire, crime and hazardous materials accidents, the problems could become greatly compounded. Both Interstate 80 (including the Bay Bridge) and Interstate 580 could

fail, communications could be disrupted, and lifeline services (water, power, waste-water treatment) could malfunction. Critical facilities and services—hospitals, emergency shelters, government institutions, police and fire departments—would be strained. Widespread confusion and panicking could impede response efforts.

The experience of the September 1985 Mexico City earthquake may offer some insight into the adequacy of emergency preparedness. Although many buildings were damaged during the event, the usual cause of major damage following earthquakes—fires—was fairly localized. Bottled propane gas was used extensively, so there were fewer gas lines to rupture. There was some leakage from the propane tanks, and one fire which resulted when the gas ignited. This is not expected to be the case for the Bay Area. Gas lines could rupture, residences are built primarily of wood, and there are more combustible materials to be found in homes and businesses.

Power generation and distribution was not adversely affected in the Mexico City earthquake, although downed distribution lines in the immediate vicinity of damaged buildings resulted in some loss of power. Interruption of telephone service was significant, due to equipment damage and loss of life among personnel when the telephone company building partially collapsed. The transportation system suffered only minor damage; in fact, the subway and the airports were immediately operational, following an inspection and roadways experienced minor buckling.

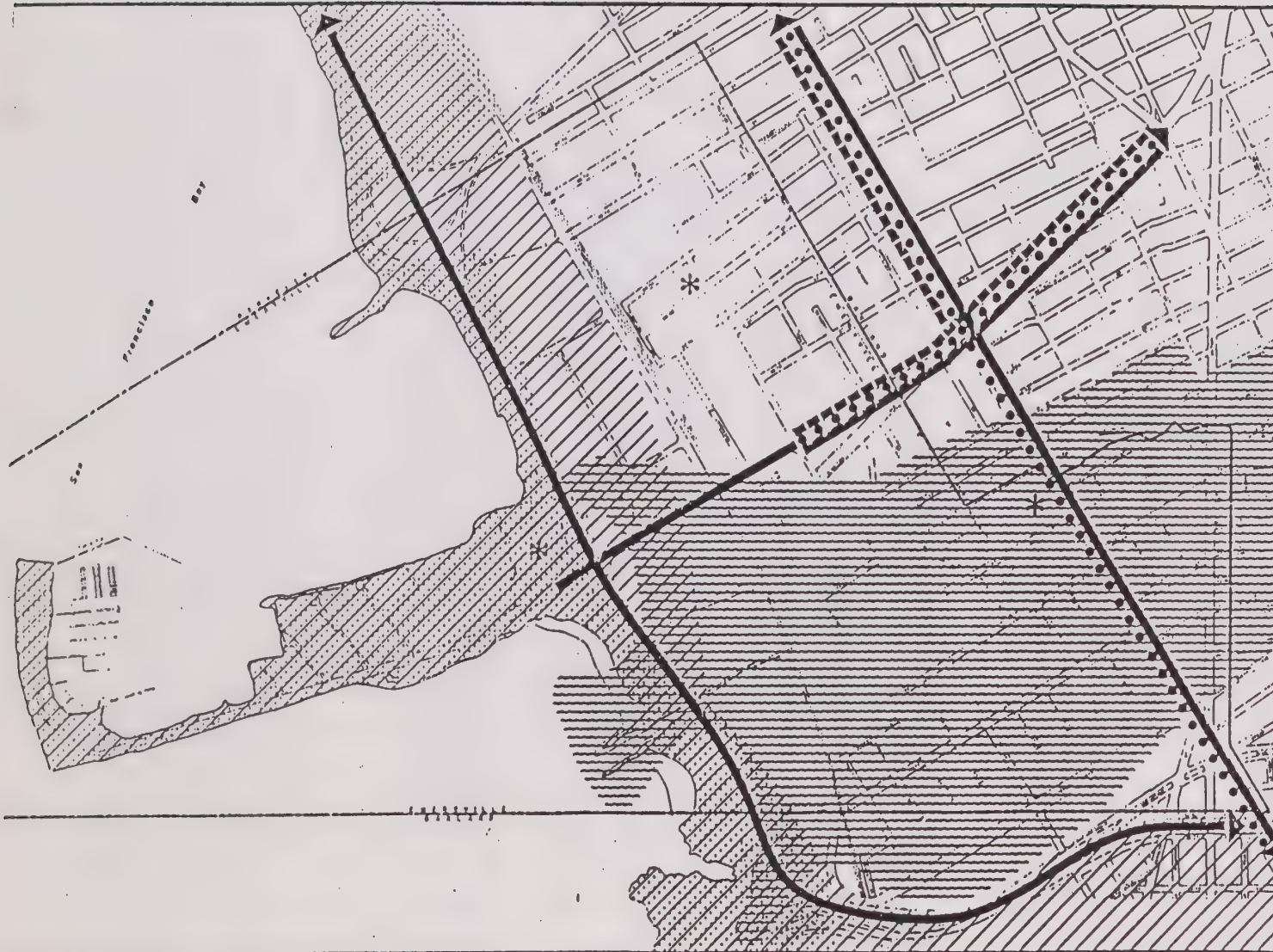
Despite the relatively good performance of most lifelines, however, it was determined that educational programs were insufficient to prepare for the catastrophe and response teams were inadequately prepared. Furthermore, there was no way to estimate the overall damage, and thus no way to determine response priorities.


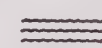





Most search and rescue efforts were performed by volunteers. In fact, volunteers proved to be invaluable, since their response was immediate. Many victims were pulled from the rubble of collapsed buildings in the first few hours, primarily by volunteers. By the time specialized search-and-rescue teams arrived, it was too late to save many of the victims.¹ However, this experience also demonstrated the need to care for the volunteers, since volunteers will attempt search-and-rescue immediately, and will continue even after trained help arrives. They need to be provided with food, water, and rest; and they should be directed in their efforts as soon as possible. More than 100 volunteer workers were killed following the Mexico City earthquake while they were searching for victims when the buildings they were working through collapsed further; and many rescuers suffered kidney damage from lack of water.² A multi-disciplinary team of engineers, firefighters and medical personnel would have been useful to pick through the rubble, assess the structural damage, direct the volunteers, avert or subdue fires, and treat victims.

¹Bay Area Regional Earthquake Preparedness Project, Networks Earthquake Preparedness News, The Mexico City Earthquake of September 19, 1985: Lessons for the Bay Area, February 1986.

²Ibid.

FIGURE V-5
EMERGENCY POTENTIAL
AND
EVACUATION ROUTES



-  AREA SUBJECT TO VIOLENT GROUND SHAKING DURING MAJOR EARTHQUAKE (All other areas in Emeryville subject to very strong ground shaking)
-  APPROXIMATE EXTENT OF WATER INUNDATION FOLLOWING DAM FAILURE AT LAKE TEMESCAL
-  APPROXIMATE AREA OF TSUNAMI INUNDATION (20-foot runup at Golden Gate Bridge)
-  FLOOD INUNDATION EVACUATION ROUTES
-  EARTHQUAKE EVACUATION ROUTES
-  GENERAL EVACUATION ROUTES
-  EMERGENCY SHELTERS

Sources: Alameda County Flood Control and Water Conservation District; USGS MF-709, MF-400; SCA.

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APPENDIX D: OPEN SPACE AND OUTDOOR RECREATION

Open Space/Recreation Classifications

Open space and recreation lands fall into several different categories. Each type of space implies a particular type of use. Acquisition, development, management, and maintenance methods and costs vary with each type of park space. Four types of recreation/open space lands are discussed: ecological preserves, historic/cultural sites, visual amenities, and recreation areas.

Ecological Preserves. An ecological preserve is open space which is left in its natural state or which is improved to restore it to its former natural state. The land is often set aside to preserve a unique plant or animal species or habitat, such as that found in the Emeryville Crescent. The costs associated with these areas are primarily acquisition costs, with minimal maintenance, since active recreation is discouraged, and access often is restricted. Ecological preserves are used mainly for nature study and viewing. As described in the General Plan, acquisition may not be necessary for the Emeryville Crescent.

Historic/Cultural Sites. Sites or structures which uniquely represent some facet of local or national history are valued as historic or cultural resources. Any remnants of the Emeryville shellmounds, if they still exist (see the Cultural Resources Element), would fall under this category. Costs associated with historic or cultural resources vary widely, depending on the nature of the resource (e.g., the site of a historic event or the structure in which it took place, or a potential archaeological find) and how the resource will be used (preserved, developed as a public facility, or restored, for example). Historic structures in Emeryville are significant in that they represent an element of the City's heritage and development. It is not expected that any remnants of the Emeryville shellmounds exist. Thus, this type of recreation resource is mentioned only in the case that some cultural resource is discovered in the future.

Visual Amenities. Street trees and median landscaping, generally associated with City-owned land, can be classified as visual amenities. Costs associated with these vary according to the type and amount of plant material used.

Recreation Areas. Recreation areas, or parks and playgrounds, involve more costs than the other types of open space and recreation lands. Passive recreation areas generally encourage activities such as picnicking, strolling, or sitting, while active recreation areas include facilities for sports or playground equipment for children. A park can include areas for both active and passive activities.

The General Plan describes three recreation area prototypes (see Figure III-11). A mini-park usually is found in a residential area and serves residents in the immediate vicinity (within 1/4 mile). The larger community park of 2-5 acres, which may contain a greater variety of facilities than a mini-park, poses significantly greater acquisition and parcel assembly problems than mini-parks, which may be developed on single vacant lots or at the ends of cul-de-sacs.

Development and Maintenance Costs

It is possible to make some generalizations about relative development and maintenance costs. Development costs are one-time costs of acquisition and construction, often financed in part by grants or development fees; maintenance costs, usually the responsibility of the City, include plant care, trash removal, and repair of damaged facilities.

Development Costs. There are two main aspects of park development costs: land acquisition and development or construction costs. Assuming that per-acre land costs remain constant regardless of parcel size, land for a smaller park will cost less to acquire than land for a larger park. Development costs vary according to the size of the park and the facilities in it. Per-acre development costs decrease as the size of the park increases, due to such factors as increased construction efficiency in developing larger sites and a lower proportion of facilities which are expensive to install, such as paving and playground equipment, included in larger sites.

While the per-acre development costs of small parks may be greater, the total cost of developing a number of small parks may be much lower than the cost of developing a single larger park, depending on the number of small parks. For example, if the City were to develop 10 mini-parks, each of which were 2,500 square feet, the total land area would be 25,000 square feet, or approximately one-half acre. A single community park would be 4-10 times larger, and any cost savings per acre probably would be countered by the total development cost.

Maintenance Costs. The major issues affecting the cost of park maintenance are the amount and kind of vegetation (grass, trees, shrubs, and groundcover), the type of irrigation system (automatic or manually operated), the proximity of storage areas to parks, and the distance maintenance crews must travel to reach parks. In addition, some facilities require special maintenance procedures which can significantly raise the costs. For example, sand in children's play lots must be screened regularly for broken glass and other debris.

As is the case with development costs, the per-acre maintenance costs may be higher for small parks than for large ones due to the time it could take to reach many small, scattered sites and the relative efficiency with which a single large site can be maintained. Again, however, the total area of many small parks will be much smaller than a single, larger park; therefore, the total maintenance costs can be much smaller.

The choice of plant materials also affects maintenance and development costs. Grass areas are extremely low in installation costs when compared with low-maintenance shrubs or trees, but require almost continual care in watering, cutting, fertilizing, and weeding. Perennial plants such as trees, shrubs, and groundcover are moderately expensive to install, and require careful maintenance for the first 2-3 years until established. If appropriate species are chosen, they require almost no maintenance when compared with turf. Beds of flowering annuals are the most expensive plant material to use in parks, both from an installation and a maintenance standpoint.

Generalized Implementation Methods

The following describes open space implementation methods which can be utilized by the City. These include regulatory tools, acquisition methods, and financing tech-

niques. Not all implementation tools are applicable to all types of open space lands. Table I notes the applicability of the methods described below.

Conditions and Dedications. Development approval can be made subject to conditions imposed by local government. Conditions can include requirements for land dedications, fees, or public improvements. A dedication is a gift of land from the developer to the municipality. Instead of donating land, developers can pay fees, usually equal to the cost of land that the developer would otherwise have to dedicate.

Subdivision Map Act. Subdivision regulations (Government Code Section 66511) enable local governments to regulate the design and improvement of land when it is divided for development. A broad interpretation of "design and improvement" has been adopted through court cases and includes the physical layout of a subdivision, dedications of public improvements and easements, and other measures "as may be necessary or convenient to insure conformity to or implementation of the general plan." The types of dedications, public improvements, or in-lieu fees which can be required include: land for park and recreation uses, public access easements, bicycle paths, local and recreational facilities.

Quimby Act. The Quimby Act (Government Code Section 66477) allows local governments to exact land dedications, in-lieu fees, or a combination of both for park and recreation as a condition of approving a final residential subdivision or parcel map. A 1981 legislative counsel opinion suggested that the Quimby Act may be used for park maintenance and utility costs, as well as for acquisition and development. The City would have to adopt a Quimby Act ordinance. Fees collected or land dedicated under the ordinance can only be used to develop new parks or rehabilitate existing parks which will serve the new subdivision, although the parks do not have to serve the new subdivision exclusively.

Planned District and Planned Unit Development Approvals. A developer could be granted "PD" zoning (which can mean higher density and more flexibility in site design and mix of uses) or "PUD" approval (which can mean more flexibility in site design) in exchange for land dedication, improvement of open space areas within the development, or payment of in-lieu fees for purchase of open space elsewhere. This process requires a great deal of negotiation between the developer, planning staff, and public.

Development Agreement. As defined by Government Code Section 65864, local governments can enter into contractual agreements with developers in which the local government effectively promises not to change its planning or zoning laws applicable to the development for a specified period of time, in return for specified commitments (such as development of parks or open space) from the developer, which the jurisdiction could not ordinarily require. Procedures for development agreements are typically added to the community's zoning ordinance. Development agreements may be appropriate for large, multi-phase projects where the developer will be required to make substantial investments for public improvements; the development agreement will contractually assure that the improvements promised by the developer will be implemented even if the development fails financially.

Acquisition. The City can provide public parks and open space by acquiring the land. This reduces the uncertainty that a particular parcel will be developed for open space or recreational purposes. Since costs of full fee acquisition are often prohibitive, several financing schemes and alternative acquisition methods have also been used.

TABLE 1: OPEN SPACE IMPLEMENTATION APPLICABILITY OF METHODS

	<u>Ecological Preserve</u>	<u>Historic/ Cultural Sites</u>	<u>Rec- reation Areas</u>	<u>Visual Amenities</u>
CONDITIONS/DEDICATIONS:				
Subdivision Map Act	X		X	X
Quimby Act	X		X	X
PD/PUD Approval		X	X	X
Development Agreement		X		
ACQUISITION:				
<u>Full Fee Acquisition</u>				
Purchase	X	X	X	X
Installment Purchase	X	X	X	X
Purchase and Sale or Leaseback	X		X	X
Donation of Gift or Bargain Sales	X	X	X	-X
Eminent Domain	X		X	
Tax Foreclosures	X	X	X	X
<u>Less Than Fee Acquisition</u>				
Scenic/Conservation Easement	X	X		X
Purchase and Resale Without Certain Rights	X	X	X	
Public Trust	X		X	
Leases	X			
Covenants, Deed Restrictions		X	X	X

Full Fee Acquisition. This technique involves public purchase and ownership of full title to the land and all rights associated with the land. This is the most foolproof way to preserve open space, but its utility is limited by the amount of revenues the City and other agencies have available and are willing to appropriate for open space purposes.

Less Than Fee Acquisition. Associated with each piece of land are development rights. This bundle of rights can be divided, and certain rights can be purchased for less than the full purchase price of the property. This means that a public agency can acquire various forms of development rights, or easements, which are written privileges that one person, public body, etc., has with regard to land owned by another person. The rights can be specified for a certain number of years, or they can run in perpetuity. This form of acquisition is beneficial in that it leaves the land on the tax rolls; however, if the property is in the path of development, the cost of obtaining the easement is often almost as expensive as purchasing the entire fee.

Eminent Domain. The basic problem with the acquisition of land is the high cost to local governments. Lands that will be used by the public must be purchased by some governmental unit, but if a mutually agreeable price cannot be determined, the land must be condemned and just compensation paid for it. There are certain non-recreational purposes for which condemnation is not permitted under State law.

Tax Foreclosures. Lands which are tax-delinquent and have been acquired by the public through foreclosure proceedings may be used for open space purposes or may be exchanged for other lands of equal value but with greater open space importance; or money received from the sale of tax-delinquent lands could be directed to open space acquisition programs. This technique has limited applicability.

Gifts. Gifts of land to local governments offer tax incentives to the donor. The cost of the donation can be deducted from the donor's gross annual income. Since the donor also avoids the capital gains tax which would have to be paid if the land had been sold for development, the total tax savings for the donor in some instances could actually exceed the net after-tax profit which would have been received from the sale. Some private non-profit organizations, such as the Nature Conservancy and the Trust for Public Land, often assist in these arrangements. Gifts of land are often used for ecological preserves, but land which is received may be exchanged for other, more important lands or sold for purposes of acquiring additional land.

Sale of School Lands. The school district could negotiate with the City on the sale of the Ralph Hawley School site to the City. This site could be used for recreation purposes.

Public Trust. As previously mentioned, Emeryville could exercise the public trust over tidelands. This is similar to a less than fee acquisition in that the public will have rights to certain uses of the land but will not gain ownership. The City is not required to compensate the owner of the fee title to the land in these cases, but uses are restricted to those which are consistent with the public trust as defined in the State constitution. These include commerce, navigation, fisheries, recreation, and ecological preservation.

Financing Methods. Methods of financing acquisitions, other than straight purchase, are defined in recognition of the financial burden that purchase often represents to local agencies.

Purchase and Sale or Leaseback. Under this arrangement, the public body would purchase the property and then sell or lease it back to the original owner subject to restrictions which ensure that the land's natural quality will be preserved and that the type and intensity of development is compatible with the natural resource.

Installment Purchase. Purchase of property can be spread out over a period, and periodic payments can be made to the owner, who would be subject to restrictions regarding the use of this land during the payment period.

Bargain Sales. A landowner could sell land at a bargain price to the City, and receive tax benefits from the sale similar to those of a gift. The difference between the value of the property and the sales price could be deducted from the seller's gross annual income. Private, non-profit organizations often assist with these arrangements.

Long-Term Lease or Lease/Purchase. The City can enter into an agreement with a landowner for a period of time long enough to let the owner recoup his investment. Provisions which give the public the option to purchase the land at various prices during the course of the lease may be included in the agreement.

Bonds. The City could issue general obligation bonds, which would require a two-thirds approval of voters. These bonds are payable from ad valorem property taxes, and they would be guaranteed by the City. State law limits the amount of indebtedness which a local government may incur. Revenue bonds, which do not usually require voter approval, are not backed by the local government, and are not subject to the debt ceiling, could also be issued. Their use is limited, however, as they are payable on revenue generated by the project. Most open space projects, other than marinas, would not generate revenue other than through purchase/saleback or purchase/leaseback arrangements.

Other. Fees can be collected under the provisions described under Conditions and Dedications. Federal and State grant programs, individuals, and foundations may be sources of funds. These programs are described in Table 2.

Public Agency Support and Jurisdiction

California Department of Parks and Recreation. The State Department of Parks and Recreation has allocated \$9 million toward the purposes of the East Bay Shoreline Park. These funds may be used for planning, development, and acquisition. Emeryville is among the communities eligible for planning funds. In order to obtain these funds, the City must make a direct request to the State Department of Parks and Recreation. According to State staff, there are no formal application forms or criteria for allocation of funds. A citizens' group currently is working with legislative representatives on funding requests for the East Bay Shoreline Park.

Federal, State, regional, and local agencies have a variety of interests and responsibilities in the conservation and management of open space resources. Many of these agencies have overlapping jurisdictions, and they have not reached a consensus on some issues, such as whether a bicycle path should be installed through the Emeryville Crescent. Several of the agencies are identified below.

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
1. PLANNING						
a. Urban water- front planning grants	State Coastal Conservancy	Plan urban waterfront projects.	Promote innovative design, shoreline uses, public access, and recreation.	Average \$50,000. Type: G	Shoreline planning.	\$50,000--Albany Specific Plan; \$20,000-- Berkeley.
b. Design arts pro- gram (G, M, 100% non- federal)	Design Arts Pro- gram, National Endowment for the Arts	Feasibility studies, schematic projects, and design competitions. May not be used for ongoing city planning.	Integrate design with planning process. Highly competitive.	Up to \$30,000. Type: G, M (100% non- federal)	Urban design for public access on peninsula, for town center, and for other mixed- use open space areas; involve local artist community.	---
2. GENERAL PROJECT IMPLEMENTATION						
a. Urban water- front restoration (Chapter 7)	State Coastal Conservancy	Waterfront restoration projects along bay. Restoration plan (§1a) must be prepared and approved.	Promote access to water, visitor-serving uses, excellence in urban design, environmental enhancement, shoreline industries.	Up to 100% of cost. Type: G, L	Bicycle/pedestri- an trails, marina upgrade.	---
b. Urban waterfront restoration- revenue bonds	State Urban Waterfront Area Restoration Financing Authority	Same as above.	Same as above. Projects must be economically self-sustaining.	Same as above. Type: O	Same as above. Project could be proposed by governmental agency (e.g., City or Redevel- opment Agency) or private entity.	---
G = grant L = loan M (50%) = matching (%) O = other LG = loan guarantee C = applications received continuously A = annual application deadline 2* = 2-year limited program						

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION (continued)

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
c. Community De- velopment Block Grants (CDBG)-- small cities	U.S. Department of Housing and Urban Develop- ment	Projects which are eligi- ble under CDBG Act. Grants awarded on a competitive basis.	City determines dis- bursement. State re- quirements emphasize improvement of low- income housing.	Cities do not normally allocate CDBG to parks. Type: G	Parks and play- grounds; commu- nity facilities.	Not normally used for parks.
d. East Bay Shore- line Park	State Parks and Recreation De- partment; Bond Acts; 1975, 1980	Acquisition, planning, development to carry out East Bay Shoreline Park Plan.	Trail connecting East Bay shoreline from Bay Bridge toll plaza to Richmond. Acquisition is a low priority.	\$10,000 minimum; no maximum. \$9 million allo- cated to East Bay cities. Type: G	Shoreline bicy- cle/pedestrian trail; shoreline acquisition/devel- opment as pier. Emeryville has received \$20,000.	Berkeley-- \$572,000; Albany--\$1.2 million to close landfill.
3. FISHING						
a. Pier con- struction or rehabilitation	Wildlife Conser- vation Board	Fishing purposes, pier upgrading. Construc- tion. Proprietary inter- est must be conveyed to the state.	---	Type: G, M (50%) Funds may not be available.	Development of Ashby Spit or North Shore- line; restore fishing pier.	Emeryville received funding to build Penin- sula pier.
4. TRAILS/ACCESS						
a. Access program	State Coastal Conservancy	Trails, parking lots.	Provide access to Bay. Must serve greater than local need. Projects which offer local matching funds are given priority.	Up to 100% of project cost. Type: G, M	---	Berkeley has received funds.
b. Bicycle/pedes- trian facilities	Metropolitan Transportation Commission	Engineering and construction of bicycle/pedestrian facilities.	Ranked according to regionwide priorities.	Coordinate with MTC. Type: G	Citywide bi- cycle/pedestrian lanes and street or rail overcrossings.	---

G = grant
L = loan

M (50%) = matching (%)
O = other

LG = loan guarantee
C = applications received continuously

A = annual application deadline
2* = 2-year limited program

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION (continued)

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
c. Bicycle lane account	Caltrans	Preliminary engineering and pavement markings.	Commuter-serving.	Up to \$90,000. Type: G	Crossings at Powell Street, railway crossings.	Bicycle lane will be built in Albany (through HOV project).
5. PARKS AND PLAYGROUNDS						
a. Roberti-Z'berg urban open space and recreation program	State Department of Parks and Recreation (Bond Act of 1984)	Allocated for each of 2 years. Emeryville must apply for it.	Urban outdoor recreation. Projects must be directed toward providing for the most urgent and unmet recreation needs of residents.	\$1,954. Type: G, block, M (75%), A (May 1)	Improvements to existing parks/playgrounds.	---
b. Regional competitive	State Department of Parks and Recreation (Bond Act of 1984)	Develop or rehabilitate park facilities; acquisition is ineligible. Recreation development on school-owned lands is eligible in some cases.	Less intensive uses, such as fishing piers, have lower priority. Compete within 10 state planning districts.	Minimum \$10,000; no max; \$25 million available for next 2 years. \$5.3 million available to bay region this year. (\$200 million in applications were received this year.) Type: G, A, (Oct. 1)	Development of new parks on dedicated land; upgrade existing parks (e.g., vest-pocket park), shoreline; community center.	Berkeley \$330,000.
c. Land and Water Conservation Fund	National Park Service	Acquisition or development of outdoor park facilities.	Serve outdoor recreation purposes. Low cost/benefit ratio. Less intensive uses, such as fishing piers, have lower priority. Compete within 10 state planning districts. Competitive.	Average \$150,000-\$200,000. Type: G, M (50%), A (until 1990)	Acquisition/development of south peninsula or new urban parks.	

G = grant
L = loan

M (50%) = matching (%)
O = other

LG = loan guarantee
C = applications received continuously

A = annual application deadline
2 = 2-year limited program

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION (continued)

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
6. MARINA, BOAT- ING, SHORELINE						
a. Small craft harbor loan	State Department of Boating and Waterways	Marina feasibility studies and marina construction or ex- pansion. Similar program for private marina operators. (If marina is privately operated, only used for non-revenue- producing components.)	---	Up to 100% of project cost. Type: L	Emeryville has received funds.	---
b. Boat launch development grants	State Department of Boating and Waterways	Build or rehabilitate boat launching. Facil- ities must be free to public.	---	Up to 100% of project cost. Type: G	Emeryville has received funds.	---
7. CULTURAL ACTIVITIES						
a. Organizational Grants Program	Organizational Grants Program, California Arts Program	Artistic programs, projects, or special events.	Highly competitive.	Type: G, M (100%)	Cooperative projects with artist community, events at com- munity center.	---
b. Environmental Education	State Department of Education, Environmental- Energy Conser- vation Service	Environmental edu- cation, development; 4 different programs.	Application standards currently being revised.	Type: G	Interpretive programs; special events.	---
<div> <div>G = grant L = loan</div> <div>M (50%) = matching (%) O = other</div> <div>LG = loan guarantee C = applications received continuously</div> <div>A = annual application deadline 2* = 2-year limited program</div> </div>						

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION (continued)

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
8. NATURAL RESERVES						
a. Resource enhancement	State Coastal Conservancy	Technical assistance, planning acquisition, improvements.	Address Bay resources, preservation, enhancement, restoration.	Average \$10,000-\$300,000. Type: G	Crescent: removal of garbage, interpretive center, restoration of natural habitat, boardwalk trail through Crescent, interpretive center, Ashby Spit.	---
b. Beach erosion control	State Department of Boating and Waterways	Shoreline protection projects, legislative approval for each grant is required.	Preserve recreational beaches or protect existing development.	Varies.	Riprap, other erosion projects.	---
c. Cooperative projects with local government	Wildlife Conservation Board	Acquisition or improvement. Acquired land is conveyed to Department of Fish and Game. 25-year proprietary interest for improvements.	Preservation of wildlife habitat, recreational fishing.	Average \$10,000-\$500,000. Type: G, M (50%)	Crescent: removal of garbage, interpretive center, restoration of natural habitat, boardwalk trail through Crescent, interpretive center, Ashby Spit.	---
d. Environmental license plate fund	The Resources Agency (State)	Acquisition, restoration of natural areas; legislative approval is required.	Access; environmental education; protection of rare and endangered plants and animals.	Varies widely. Type: G, A (July 15)	Crescent: removal of garbage, interpretive center, restoration of natural habitat, boardwalk trail through Crescent, interpretive center, Ashby Spit.	---

G = grant
L = loan

M (50%) = matching (%)
O = other

LG = loan guarantee
C = applications received continuously

A = annual application deadline
2* = 2-year limited program

TABLE D-2: FUNDING PROGRAMS FOR OPEN SPACE/RECREATION (continued)

<u>Project Type</u>	<u>Agency/Program</u>	<u>Purpose/ Eligible Projects</u>	<u>Priorities/ Selection Criteria</u>	<u>Funding Availability and Type</u>	<u>Potential Ap- plication to Emeryville</u>	<u>Example(s) in Adjacent Cities</u>
9. OTHER						
a. Private sources	Landowners (Santa Fe), Private Foundations	Acquisition of land, grants.	Coordination with Santa Fe; research at Foundation Center.	Not a grant pro- gram; must be negotiated.	South Peninsula; Ashby Spit; varies.	---
b. Public trust	State Lands Commission	Claim public trust over Crescent.	---	Not a grant program; must be negotiated.	Emeryville Crescent.	---
c. Natural disaster assistance	State Office of Emergency Services	Repair public property damaged by natural disaster; will not fund purely recreational facilities unless declared a federal emergency.	Must be declared a local emergency by state. (If declared a federal emergency, state can apply for federal funds.)	Type: G, M (determined by cost-sharing formula)	Repair of storm damage (declared state of emergency).	----
d. Public law 99 program	U.S. Army Corps of Engineers	Repair of flood control works damaged by flood or unusual storm.	Does not give grants for local repair work by U.S. Army Corps of Engineers.	Type: G, O (funds may not be available)	---	---
<hr/> G = grant L = loan M (50%) = matching (%) O = other LG = loan guarantee C = applications received continuously A = annual application deadline 2* = 2-year limited program						

U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service (FWS) has expressed a strong interest in the Emeryville Crescent as one of the few remaining tidal marshes in the San Francisco Bay. The FWS would not purchase the land, as it believes the Clean Water Act, BCDC, and the potential public trust easement provide a reasonable degree of protection from non-water development. Because any alteration of the land may affect the tidal marsh, the FWS has requested review of any development proposed near the shoreline. The top priorities for protection by FWS are the rare and endangered species which are known to inhabit the area, migratory bird and fish habitats, and the Bay's ecosystem. Because of the presence of the endangered salt marsh harvest mouse and clapper rail in the Crescent, the FWS recommends against a continuous path through the Crescent and suggests that the driftwood sculptures on the mudflats may be seriously damaging the natural environment essential for the survival of these species.¹

California Department of Fish and Game. This agency would assume management responsibility for the Emeryville Crescent as a wildlife refuge whether another agency acquires it or the public trust is exercised. As a wildlife refuge, the Crescent would not be publicly or privately developed or given extensive public access. The agency remains neutral on the question of whether a bicycle path through the refuge is appropriate; however, a representative notes that in order to manage the area as a wildlife refuge, wildlife and people must be separated. Ideally, the sculpture garden would be removed, but a limited and restricted area for driftwood sculpture could be provided and perhaps improved from its present state by requiring all sculpture to be constructed of natural materials and in natural colors.²

Coastal Conservancy. The Coastal Conservancy, a State agency charged with protection and enhancement of resources in the Coastal Zone and the San Francisco Bay shoreline, may award loans or grants to local, State, or other public agencies, and to non-profit organizations and land trusts, or may undertake projects itself where local agencies are unable to do so. The Conservancy can mitigate some environmental impacts of development projects by providing public access where necessary or desirable.³ The Coastal Conservancy presently is funding shoreline access projects in Berkeley and soon will provide funds to Albany as well.

Bay Conservation and Development Commission (BCDC). BCDC has jurisdiction over lands 100 feet landward of the Bay shoreline. Any development which is proposed within this boundary must be consistent with BCDC's Bay Plan.⁴ The Bay Plan policies that affect Emeryville are as follows:

¹Peggy Kohl, U.S. Fish and Wildlife Service, December 12, 1984.

²Ted Wooster, Environmental Services Supervisor, California Department of Fish and Game, November 16, 1984.

³Peter Brand, Coastal Development Analyst, California Coastal Conservancy, November 26, 1984.

⁴San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan, January 1969, as amended July 1979, September 1983.

Wildlife. Bay Plan Map 4 identifies the Emeryville Crescent as a high-value water-bird habitat and wildlife area. Nothing may be constructed within BCDC's jurisdiction which would be detrimental to the preservation of this area as a wildlife refuge.

Public Access. Public access to the Bay, according to BCDC policies, should serve scenic, recreational and educational purposes. Access should be provided where it will not be detrimental to the purposes of a refuge; although if access is restricted to a less fragile area which still offers views, and an interpretive exhibit illustrating the fragility of the environment is provided, visitors may be less tempted to disturb the wildlife area.

Filling. The Bay Plan specifies that the Emeryville area of the Bay should be developed for public and commercial recreation uses and that such development be coordinated with Albany and Berkeley. It notes that "some fill may be necessary to create usable shoreline areas, protected water areas and park space."² The narrow section of the Frontage Road north of the Peninsula would be widened for pedestrians when the bicycle/pedestrian path is constructed, but actual filling of the Bay for this purpose is not anticipated.³

Views. Views of the Bay should be maintained; new development, accordingly, should not create a wall between the Bay and the land.

Appearance, Design and Scenic Views. According to the Bay Plan, "unnatural debris should be removed from sloughs, marshes, and mudflats that are retained as part of the ecological system. Sloughs, marshes and mudflats should be restored to their former natural state if they have been despoiled by human activities."⁴ Although the activities on the mudflats undoubtedly harm the fragile environment, structures like the sculptures draw people to the Bay, which is encouraged by BCDC in most instances. Consequently, BCDC is divided on whether the Emeryville driftwood sculptures should be removed or retained.

Regional Water Quality Control Board (RWQCB). As discussed Appendix F, Water Resources, the RWQCB is responsible for the quality of the water in the greater Bay Area, including San Francisco Bay. Accordingly, the RWQCB has described beneficial uses for the Bay in its 1982 Water Quality Control Plan. These include: non-contact water recreation, wildlife habitat, preservation of rare and endangered species, fish spawning, and estuarine habitat.

East Bay Regional Parks District. The East Bay Regional Parks District (EBRPD) has planned a shoreline bicycle/pedestrian path through Alameda County for the past

¹ Nancy Wakeman, Chief of Permits, Bay Conservation and Development Commission, November 16, 1984.

² San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan, January 1969, as amended July 1979, September 1983, Map 4.

³ Nancy Wakeman, Chief of Permits, Bay Conservation and Development Commission, November 16, 1984.

⁴ San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan, January 1969, as amended July 1979, September 1983, p. 29.

decade, although responsibility for implementation of this plan has never been identified. The concept of the plan is similar to that proposed for the East Bay Shoreline Park under the State Department of Parks and Recreation. The EBRPD is not currently planning any acquisition for construction of the path; however, it would oversee maintenance and operation if one were constructed.¹

Alameda County. The County, in its General Plan, recommends that natural areas be assessed for their resource sensitivity and vulnerability to development impacts. It also recommends that the EBRPD or Federal and State agencies acquire "for public management those environmental resource areas which are of critical countywide, regional, statewide, or national significance, including important wildlife habitat areas, watersheds and ground water basins, and areas providing or having the potential to serve outdoor recreation needs."²

City of Berkeley. Berkeley's waterfront area plays a major role in plans for the East Bay Shoreline Park. The City currently is conducting a planning study for development of the waterfront area.

City of Oakland. The Oakland General Plan proposes a bicycle/pedestrian path through the Emeryville Crescent. The plan asserts that the path would not be inconsistent with a wildlife refuge.

Port of Oakland. A portion of the land in the Emeryville Crescent, outside of Emeryville itself, lies within the jurisdiction of the Port of Oakland. It is designated for recreational uses in the Port's shoreline plan, although the north harbor site is proposed as a future shipping terminal. The construction of this project would require landfill and is contingent on a permit from BCDC.

Private Organizations. The Audubon Society, in conjunction with the Bodega Bay Institute, sponsored an exhaustive study of the Emeryville Crescent ecology.³ The Golden Gate Chapter of the Audubon Society opposes the bicycle path, contending that the public access such a path would provide is inappropriate for a fragile area. In particular, the presence of people and their pets in the Crescent would seriously disturb the clapper rail habitat. To protect the area, the Audubon Society calls for the removal of the driftwood sculptures to the area north of Temescal Creek, restricted access south of this area, and construction of an interpretive exhibit demonstrating the ecology of the area.⁴

The Sierra Club has collaborated with the Golden Gate Audubon Society, Save San Francisco Bay Association, League of Women Voters, and Citizens for Eastshore State Park to seek State funding and assistance in implementing the State East Bay Shoreline Park proposals.

¹Peter Koos, Senior Landscape Architect, East Bay Regional Parks District, November 9, 1984.

²County of Alameda, General Plan for the Central Metropolitan, Eden and Washington Planning Units, January 1981 p. 25.

³Bodega Bay Institute, The Crescent: An Environmental Assessment of the Emeryville Crescent, Golden Gate Audubon Society, 1978.

⁴John Zublackis, Past President, Golden Gate Audubon Society

ENVIRONMENTAL REVIEW

Emeryville General Plan
Comprehensive Amendments

Summer, 1992

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Summer, 1992

INTRODUCTION:

Any amendment to a general plan constitutes a "project" for the purposes of the California Environmental Quality Act (CEQA). If an initial study shows that any aspect of a general plan may cause a significant impact on the environment, an EIR must be prepared unless one has previously been prepared which evaluates the same impacts and which is determined to be adequate for the "project".

The nature of an EIR for a general plan is quite different than one prepared for a specific construction project. State law permits it to be far less detailed since its effects cannot be predicted with accuracy and it may deal with issues on a level of broad generalities. A general plan may function as its own EIR with no separate EIR if it addresses all points required to be in an EIR. The 1987 general plan was prepared in this fashion and with a Final EIR, was found to meet CEQA requirements.

The EIR for the general plan found that implementation of the plan would generate certain significant environmental impacts which could be mitigated to some degree but not eliminated entirely, as well as other significant effects that could be completely mitigated. The Emeryville City Council, in its 1987 certification of the EIR and approval of the general plan, concluded that any significant effects remaining after the imposition of all feasible mitigation measures would be justified due to overriding considerations of benefit to the city.

Once an EIR has been prepared, no additional EIR need be prepared for a project unless it is discovered that subsequent changes in the proposed project or the circumstances under which the project is to be undertaken will require important revisions of the previous

EIR due to the involvement of new significant environmental impacts not considered in the previous EIR. The EIR for the 1987 general plan contains data which, for the most part, is sufficiently current to suffice for a long-range general plan. CEQA Guidelines (Section 15164) provide for an Addendum to the EIR if only minor technical changes or additions are necessary to make the previous EIR adequate under CEQA.

The changes proposed to the 1987 plan consist largely of the removal of material from the plan document to an appendix. What remains are the meaningful parts of the plan -- its goals, policies and actions -- without its supporting data. There are other changes, however, to the substance of the plan. They deal largely with land use and circulation. Land use changes involve the redesignation of a number of areas with a significant increase in mixed use land area. Circulation changes involve the shifting of one arterial (Yerba Buena to 40th Street) and changing the classification of certain streets from arterial or local to collector. None of the changes would have impacts that were not considered in the 1987 EIR.

The City of Emeryville completed an Initial Study (including an environmental checklist and a discussion of the environmental evaluation) concerning the proposed comprehensive amendments to the Emeryville General Plan. On the basis of the Initial Study, the City has determined that the environmental impacts of the proposed Plan amendments are substantially the same as those described in the EIR for the 1987 general plan. The Initial Study confirms that implementation of the proposed Plan amendments will not generate any new or more severe significant environmental impacts than discussed in the 1987 EIR. Therefore, CEQA specifies that no subsequent EIR should be prepared. In accordance with CEQA, an Addendum to the 1987 general plan EIR has been prepared to make technical changes and additions to the existing EIR so that the EIR is adequate as applied to the Plan amendments. Accordingly, the environmental documentation supporting the proposed comprehensive

amendments to the Emeryville General Plan consist of (1) the Initial Study checklist and evaluation, (2) the EIR for the 1987 general plan, including the information in the Addendum to that EIR, and (3) the proposed goals, policies and actions of the proposed amendment, which function as mitigation measures to the plan impacts, in substitute for the 1987 measures. It should be noted that the 1987 EIR consists of the 1987 general plan (which functioned as the draft EIR since it was prepared as a combination EIR and general plan) and the 1987 Final EIR for the Emeryville General Plan. For the convenience of the public and the decision-makers, a General Plan Appendix has been prepared and is available for review. The General Plan Appendix is essentially the 1987 general plan with its policy statements deleted, leaving primarily the environmental data that functioned as the draft EIR for the 1987 general plan.

APPLICATION No. _____

ENVIRONMENTAL CHECKLIST FORM
(To be completed by Lead Agency)

I. BACKGROUND

1. Name, Address and Phone Number of Proponent: City of Emeryville

2. Agency Requiring Checklist City of Emeryville
3. Name of Proposal, if applicable Emeryville General Plan Revisions

II. ENVIRONMENTAL IMPACTS

(Explanation of all answers is required. Attach additional sheets if necessary).

	YES	MAYBE	NO	SOURCE
1. EARTH. Will the proposal result in:				
a. Unstable earth conditions or in changes in geologic substructures?	—	—	X	See III. Discussion
b. Disruptions, displacements, compaction or overcovering of the soil?	—	—	X	"
c. Change in topography or ground surface relief features?	—	—	X	"
d. The destruction, covering or modification of any unique geologic or physical features?	—	—	X	"
e. Any increase in wind or water erosion of soils, either on or off the site?	—	—	X	"
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition, or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	—	—	X	"

	YES	MAYBE	NO	SOURCE
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	<u>X</u>	—	—	See III Discussion
2. AIR. Will the proposal result in:				
a. Substantial air emissions or deterioration of ambient air quality?	—	<u>X</u>	—	"
b. The creation of objectionable odors?	—	<u>X</u>	—	"
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	—	<u>X</u>	—	"
3. WATER. Will the proposal result in:				
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	—	—	<u>X</u>	"
b. Changes in absorption rates, drainage patterns or the rate and amount of surface water runoff?	—	<u>X</u>	—	"
c. Alterations to the course or flow of flood waters?	—	—	<u>X</u>	"
d. Change in the amount of surface water in any water body?	—	—	<u>X</u>	"
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity?	—	<u>X</u>	—	"
f. Alteration of the direction of rate of flow of ground waters?	—	—	<u>X</u>	"
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	—	—	<u>X</u>	"
h. Substantial reduction in the amount of water otherwise available for public water supplies?	—	—	<u>X</u>	"
i. Exposure of people or property to water related hazards such as flooding or tidal waves?	—	<u>X</u>	—	"

	YES	MAYBE	NO	SOURCE
4. PLANT LIFE. Will the proposal result in:				
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	—	<u>X</u>	—	See III. Discussion
b. Reduction of the numbers of any unique, rare or endangered species of plants?	—	—	<u>X</u>	"
c. Introduction of new species of plants in a barrier to the normal replenishment of existing species?	—	—	<u>X</u>	"
5. ANIMAL LIFE. Will the proposal result in:				
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?	—	—	<u>X</u>	"
b. Reduction of the numbers of any unique, rare or endangered species of animals?	—	—	<u>X</u>	"
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	—	—	<u>X</u>	"
d. Deterioration to existing fish or wildlife habitat?	—	—	<u>X</u>	"
6. NOISE. Will the proposal result in:				
a. Increases in existing noise levels?	—	<u>X</u>	—	"
b. Exposure of people to severe noise levels?	—	<u>X</u>	—	"
7. LIGHT AND GLARE. Will the proposal produce new light or glare?	—	<u>X</u>	—	"
8. LAND USE. Will the proposal result in a substantial alteration of the present or planned land use or an area?	<u>X</u>	—	—	"
9. NATURAL RESOURCES. Will the proposal result in?				
a. Increase in the rate of use of any natural resources?	—	—	<u>X</u>	"

	YES	MAYBE	NO	SOURCE
b. Substantial depletion of any natural resource?	—	—	<u>X</u>	See III Discussion
10. RISK OF UPSET. Will the proposal involve:				
a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	—	—	<u>X</u>	"
b. Possible interference with an emergency response plan or an emergency evacuation plan?	—	—	<u>X</u>	"
11. POPULATION. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	<u>X</u>	—	—	"
12. HOUSING. Will the proposal affect existing housing, or create a demand for additional housing?	<u>X</u>	—	—	"
13. TRANSPORTATION/CIRCULATION. Will the proposal result in:				
a. Generation of substantial additional vehicular movement?	<u>X</u>	—	—	"
b. Effects on existing parking facilities, or demand for new parking?	<u>X</u>	—	—	"
c. Substantial impact upon existing transportation and traffic systems?	—	<u>X</u>	—	"
d. Alterations to present patterns of circulation or movement of people and/or goods?	—	<u>X</u>	—	"
e. Alterations to waterborne, rail or air traffic?	—	—	<u>X</u>	"
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	—	<u>X</u>	—	"

	YES	MAYBE	NO	SOURCE
14. PUBLIC SERVICES. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:				
a. Fire protection?	<u>X</u>	<u> </u>	<u> </u>	See III Discussion
b. Police protection?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
c. Schools?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
d. Parks or other recreational facilities?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
e. Maintenance of public facilities, including roads?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
f. Other governmental services?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
15. ENERGY. Will the proposal result in:				
a. Use of substantial amounts of fuel or energy?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
b. Substantial increase in demand upon existing sources of energy or require the development of new sources of energy?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
16. UTILITIES. Will the proposal result in a need for new systems or substantial alterations to the following utilities:				
a. Power or natural gas?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
b. Communications systems?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
c. Water?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
d. Sewer or septic tanks?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
e. Storm water drainage?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
f. Solid waste and disposal?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
17. HUMAN HEALTH. Will the proposal result in:				
a. Creation of any health hazard or potential health hazard (excluding mental health)?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
b. Exposure of people to potential health hazards?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>

	YES	MAYBE	NO	SOURCE
18. AESTHETICS. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	—	<u>X</u>	—	See III Discussion
19. RECREATION. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	—	<u>X</u>	—	"
20. CULTURAL RESOURCES.				
a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archeological site?	—	<u>X</u>	—	"
b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric, historic, or architecturally significant building, structure, or object?	—	<u>X</u>	—	"
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	—	<u>X</u>	—	"
d. Will the proposal restrict existing religious or sacred uses within the potential impact area?	—	—	<u>X</u>	"
21. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	—	<u>X</u>	—	"

	YES	MAYBE	NO	SOURCE
b. Does the project have the potential to achieve short-term to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).	—	—	X	See III. Discussion
c. Does the project have impacts which are individually limited but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant).	X	—	—	"
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	—	—	X	"

III. DISCUSSION OF ENVIRONMENTAL EVALUATION (Attach Statement)

IV. DETERMINATION (To be completed by the lead agency)

On the basis of this initial evaluation:

— I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.

— I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.

X I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
An EIR has been prepared. See Introduction.

(Signature)

(Title)

(Printed Name)

(Date)

Environmental Checklist

III. DISCUSSION OF ENVIRONMENTAL EVALUATION

1. Earth

Emeryville lies close to several known earth faults and would experience heavy to violent ground shaking in a major earthquake, but the soils and topography of Emeryville suggest that potential hazards of liquifaction, subsistence, landslides and settlement would not have a high potential for occurrence. In addition, mitigation measures would further reduce the less than significant impacts of these hazards, as well as the potentially significant impact of exposure of people or property to geologic hazards. Mitigation measures dealing with such problems are contained in General Plan sections on Geotechnical Hazards and Emergency Preparedness. See Final EIR pg I-30 and General Plan Appendix pg V-2 ff. for fuller discussion.

2. Air

While air quality in Emeryville is generally good, due to clean air blowing off the ocean and San Francisco Bay, it is currently a significant regional problem, caused mostly by human activities such as motor vehicle use and industrial

emissions. Both Federal and State laws have been enacted to deal with this problem. Air quality standards for key pollutants have been established, and means for achieving these standards are part of a continuing planning and effectuation process undertaken by the responsible public agencies. Emeryville's projected growth has been incorporated into the regional strategies adopted to attain air quality goals. The 1987 EIR evaluated the impact of increased air pollutant emissions that would result from the buildout proposed by the plan and set forth a variety of measures, mostly focussed on reducing automobile usage, to mitigate these impacts. It did not find that air quality degradation would constitute a significant impact of the plan. More recent data on air quality has been included in the Bay/Shellmound Street Project Air Quality Study (July, 1992). The new data do not raise important new issues that would warrant any change in the initial EIR. Indeed, they indicate that air pollutants produced by motor vehicles (the principle source of local pollution) will insignificantly increase by 1995 and will actually decrease by the year 2010. The general plan has a 20-year time horizon. See General Plan sections on Land Use, Circulation and Air Quality. See also Final EIR pps. I-32,33 and General Plan Appendix pg. IV-15 ff. and the Air Quality Study for Bay/Shellmound Street Project Volume I. Because projected growth in Emeryville that would occur with implementation of the revised General Plan has been factored into regional planning designed to improve air quality (e.g. Clean Air Plan developed by Bay Area Air Quality Management District) and development in Emeryville will comply with federal, state and regional air quality programs, long term buildout under the General Plan will not generate significant impacts.

3. Water

Emeryville's water resources consist of San Francisco Bay, Temescal Creek and ground water. Stormwater runoff is the major source of contaminants to these water resources and industrial uses produce the greatest amount of such contaminants. The Plan calls for the replacement, over time, of much of the industrial area by commercial and residential uses, thus lessening the less than significant impact of these hazards. While no specific mitigation measures are proposed to lessen stormwater impacts, the overall impacts resulting from the transition from industrial to residential and commercial would be beneficial. The city does not lie within a 1000-year flood plain but could experience flooding by a tsunami or the failure of the Lake Temescal Dam. See General Plan sections of Water Resources, Biological Resources, Flood Hazards and Hazardous Materials. See also Final EIR pps I-33,34 and General Plan Appendix pg IV-2 ff. and V-14-16.

4. Plant Life

There are no known rare or endangered plants in Emeryville. The Emeryville Crescent, however, is a regionally important salt marsh whose vegetation (supportive of wildlife, some of which is rare or endangered) is disrupted by human activity. The Plan proposes regeneration of native vegetation in the Emeryville Crescent and the development of a landscape plan for the entire city which would emphasize drought-resistant plant materials. See General Plan section on Biological Resources and Land Use subsection Landscape. See also Final EIR pg I-34 and General Plan Appendix pps IV-6 ff.

5. Animal Life

There are several species of rare or endangered animals which visit or inhabit the Emeryville Crescent. The Plan contains proposals to restrict human access to this area to protect the habitat, promote educational use of the area and restrict any Bay fill projects. See General Plan section on Biological Resources, Final EIR pg I-34 and General Plan Appendix pps IV-6 ff.

6. Noise

The greatest sources of noise in Emeryville will continue to be vehicular operation on the streets and freeways as well as railroad usage. Industrial uses and aircraft flyovers cause noise but are not prevalent or pervasive. The only uses potentially exposed to unacceptable noise levels would be residential or hotel uses in the Bayfront and commercial uses along I-80. The Plan sets forth mitigation measures to control noise impacts, including standards and calls for noise legislation. Adoption and implementation of these measures would reduce the noise potential to a level of non-significance. See General Plan section on Noise; Final EIR pg I-3 and appendix G, and General Plan Appendix pg V-17 ff.

7. Light and Glare

Most of Emeryville is presently developed and incremental replacement development will be of a compatible scale and character. Large scale redevelopment areas are likely to have extensive night-lighted parking areas. Plan goals and policies are directed toward assuring the compatible co-existence of all land uses. Any individual future project which might create unacceptable light and glare would be incompatible. See General Plan Citywide Goals and section on Land Use. The plan also calls for design standards to be imposed on such parking facilities (Parking Policy #1) which should assure the impacts of new lighting be held to a level of non-significance.

8. Land Use

The overall land use pattern for the majority of Emeryville will remain unchanged from its present pattern under the Plan, but some 30 % of Emeryville's land area is subject to new development. The EIR for the general plan has concluded that the environmental impacts oof alterations in the land use pattern and higher density development may be mitigated but not eliminated. While the land use pattern proposed in this revision differs in some respects with the present plan, the impacts would not differ significantly because the overall intensity of development remains within the same range so that the assessment of impact remains valid. See EIR Addendum for further discussion, General Plan Appendix pps. III-31 ff. and Final EIR pps. I-17 ff. The General Plan sets forth mitigation measures (objectives, policies and implementation actions) in its sections on Land Use, Community Design and Noise, which would reduce the impact of changes, other than traffic impacts. Traffic impacts are discussed under 13.

9. Natural Resources

The Plan does not anticipate any increase in the rate of use or depletion of any natural resources, thereby engendering no adverse impacts. See Plan sections on Environmental Resources.

10 Risk of Upset

The concern here is with an explosion or release of hazardous substances, or the possible interference with an emergency response or evacuation plan. The Plan discusses such matters in its Public Health and Safety sections on Hazardous Materials and Emergency Preparedness. It calls for the cleanup of hazardous materials and the continued maintenance of an emergency response plan, shelters and evacuation routes. Provided that users of potentially hazardous substances obey all applicable laws and good management practices, impacts will be insignificant. See also Final EIR pps I-35,36 and General Plan Appendix pg V-24 ff. and V-29 ff.

11.,12. Population and Housing

The General Plan anticipates significant increases in local employment, posing a substantial housing/jobs imbalance beyond that which exists at present, and creating a demand for additional housing. Because of historical regional land use patterns, much of the resulting housing demand will be met outside of Emeryville. Nonetheless, the plan contains policies to increase the housing supply in previously non-residential areas of Emeryville, as well as to conserve existing housing. It contains policies and programs aimed at providing safe, decent and affordable housing in Emeryville to an extent which would reduce the environmental impacts to a level of non-significance. See Emeryville Housing Element, January, 1992, and Final EIR pps I-6 ff.

13. Transportation/Circulation

The Plan anticipates significant increases in both daytime and nighttime population which, in turn, would generate additional traffic and increase parking demand. Such traffic could create significant congestion, increasing potential hazards to vehicles, bicyclists and pedestrians. The EIR has concluded that the significant environmental impacts of the increased traffic may be mitigated but not eliminated. The Plan contains a number of mitigation measures. See General Plan circulation section, General Plan Appendix Circulation and Traffic Analysis, Final EIR pps I-22 ff. and EIR Addendum. The traffic analysis assumes no change in existing modal patterns, in effect, providing a worst case scenario. However, the Plan contains a number of policies aimed at reducing auto usage (e.g. mixed land use, live/work, ATSM, bike/pedways). The plan will have no impact on waterborne, air or rail traffic because the increased demand generated by new development in Emeryville would constitute an insignificant increase in these transportation modes.

14.,15.,16. Public Services, Energy and Utilities

The concerns here relate to demands placed on public services, utilities and energy resources as a result of future development. The EIR has concluded that this demand constitutes a significant environmental impact which may be mitigated but not eliminated. Increased police and fire personnel will be needed and ;more open space will be required. The Plan calls for a number of improvements to deal with these issues. Fire protection will be upgraded with a a new station in the vicinity of 53rd and Hollis; a new civic center will be developed for most administrative, governmental and cultural requirements of the city; child care and senior citizen services will be continued; need for school expansion (while not anticipated) will be monitored; recreational facilities will be expanded; and a program will be developed to monitor and upgrade water, storm drain and sewer lines. Energy consumption will increase with development but a variety of Plan policies would mitigate the impacts, including use of alternative energy sources and conservation. These measures are intended to reduce the impact of new development. Other utilities would not be significantly impacted. The Plan calls for developer exáctions in the form of land dedication, fees kor public improvements to implement its open space proposals. For further discussion, see General Plan section on Public Facilities and Services as well as related policies in the Environmental Resources and Public Health and Safety chapters. See also Final EIR pgs 25,26, pps I-33,34, and General Plan Appendix pgs III-22 ff., IV-17 ff. and appendix D.

17. Human Health

A major concern here is whether the Plan may cause the creation of a human health hazard or involve the use, production or disposal of materials which pose a hazard in the area. Hazardous materials were used in much of Emeryville's industrial past, which will require extensive cleanup at considerable cost at certain sites. New industries, such as the bio-tech group,

may also employ materials which, if mishandled, could also become hazardous. However, if appropriate mitigation measures are undertaken, the environmental impacts would be reduced to a level of non significance. While regulatory and enforcement mechanisms are administered by the State and County, the Plan calls for City cooperation with these agencies. These issues are addressed in the General Plan section on Hazardous Materials and more extensively in the General Plan Appendix pg V-24 ff. See also Final EIR pps I-35,36.

18. Aesthetics

Overall, the Plan is intended to improve the city's appearance and rid the city of offensive sites open to public view. Present large vacant open areas would be replaced with development conforming to setback, landscaping and building design and other policies. See General Plan Community Design section, Final EIR pps I-26 ff., EIR Addendum and General Plan Appendix III-40ff. The Plan seeks to minimize the visual impacts of more intensive development proposed for the Peninsula and along the I-80/I-580 freeways. The EIR has concluded that while the significant impacts of new high rise development may be reduced, they cannot be eliminated. It mitigates the possibilities for adverse aesthetic effects by requiring that building scale and orientation vary to protect views and for buildings to be visually harmonious with existing development scale.

19. Recreation

Existing recreational facilities are inadequate to meet the needs of the city's future population. Thus the Plan proposes development of two new parks scattered through the city as well as the development of pedestrian-oriented corridors and open spaces to meet these needs. See General Plan sections on Land Use, Community Design and Public Facilities and Services, Final EIR pg I-26, General Plan Appendix pgs III-40 ff. and pgs III-22 ff.

20. Cultural Resources

As the former homesite of the Costanoan Indians, there are possible remnants of their occupation. While shellmounds near Temescal Creek have been largely destroyed, other remnants may be unearthed by development. Mitigation measures, such as requiring archeological monitoring and inventorying of likely sites, are contained in the Plan. These measures would reduce the effects to a level of insignificance. See General Plan Cultural and Historic Resources section, Final EIR pg I-35 and General Plan Appendix pps IV-20 ff.

21. Mandatory Findings of Significance

a. The Emeryville General Plan is designed to control and direct growth within the city, which would otherwise occur without a plan, in a manner that is most beneficial to Emeryville's citizenry. Nonetheless, any increase in development will bring with it more people, more traffic, and more goods and materials. Cumulatively, they have the potential to degrade the quality of the environment. However, none of the plan proposals would have negative impacts on fish, wildlife, plants or historical matters.

b. The Plan is placed in a fifteen year growth framework with a focus on long term impacts. It does not seek to satisfy short term goals. While short term impacts resulting from individual unidentified development projects consistent with the plan are likely to occur, they are too speculative to warrant discussion. Any such impacts, however, would be for the purpose of accomplishing long-range goals.

c. Since the plan is a long range citywide guide, its impacts are the cumulative effects of all projects that will occur during this period. Cumulatively significant impacts are expected and are discussed elsewhere (see, for example, land use and circulation).

d. The EIR which has been prepared has identified the significant

environmental impacts of the plan and contains a variety of mitigation measures to reduce those impacts so that, while some remain significant, they would not have substantial adverse impacts on human beings.

rev. 7/6//92

ADDENDUM

Emeryville General Plan E.I.R.

Initial study of the amendments proposed for the Emeryville General Plan indicate there are no new significant impacts not considered in the previously prepared EIR. Under these circumstances, the existing EIR may be used. Provision has been made, however, in the CEQA Guidelines for the preparation of an Addendum to deal with minor technical changes or additions which do not raise important new issues about the significant effects on the environment.

The proposed amendments to the 1987 plan involve some changes not considered by the existing EIR. While the changes do not result in new significant impacts, they warrant further discussion, nonetheless.

CIRCULATION

The circulation impacts reviewed in the EIR included only one major street construction project - a Bay/Shellmound/Yerba Buena arterial street. This proposal is retained in the proposed amendments but with a shifting of the Yerba Buena segment to 40th Street. This realignment of a transportation corridor, in itself, will result in no increase in traffic and will eliminate the need for a connection from Yerba Buena to 40th Street called for in the 1987 Plan.

The proposed changes also call for a Landregan/ Overland/Horton Street connection. Such a connection would facilitate intra-city movement and could alleviate congestion at the critical Powell/Hollis intersection.

The bicycle and pedestrianway system is proposed to be simplified, with the deletion of certain designated corridors. Since the plan assumes these corridors to be within the street rightof-way for the most part, their deletion will have no environmental impact.

LAND USE

The revisions to the general plan include a number of changes in the land use map. The south Bayfront area is shown as commercial rather than the present combination of mixed use, residential and office. The north Bayfront area substitutes mixed use for the present office designations. Designations for the area east of the railroad corridor and north of Powell Street remains unchanged, but south of Powell Street there are several changes. Mixed use replaces industrial (with regional retail as an option) south of Park Avenue and replaces commercial and residential north of Park.

These changes could have new significant impacts if it could be shown that they might result in significant increases in traffic. It is not possible to project the future impact of these changes with any degree of accuracy due to the great range of uses allowed and development intensities possible. For example, in an area designated commercial, a development might consist of a complex of high density office buildings with multi-level parking or a single story regional retail complex with extensive open parking. Based upon the assumptions employed in the present EIR for employee densities (Appendix C, Table 1) there do not appear to be significant differences between commercial and industrial uses, although there is a considerable range in each category (300 sq. ft. to 700 sq. ft. per commercial employee and 300 sq. ft. to 1300 sq. ft. per employee for industry). Therefore, while commercial space increases under the proposal at the expense of office and mixed use in one section, and mixed use increases at the expense of office, commercial, residential and industrial in other sections, the net impact would not appear to result in traffic or air emission increases which could be labelled as environmentally significant.

Other policies of the plan come in to play here as well. Land Use Policy 3, for example, states in part that the City intends to monitor development impact and that development proposals which

would overload circulation, water supply, waste water disposal, fire, police or school systems shall not be approved.

AESTHETICS

The issue of high rise buildings is dealt with in the Community Design section of the 1987 plan as well as the proposed amendments. Both documents call for retaining the low to midrise form of buildings in all parts of the city with a few exceptions. Present policy would allow high rise buildings on the Peninsula and portions of the north Bayfront area. The amendments would also allow high rise on the Peninsula but also "along the I-580/I-80 freeway or as part of an integrated large scale development plan". This could result in a greater number of high rise buildings over a more extensive area. This in turn could have an environmental impact due to the resulting blockage of views from various vantage points.

However, the EIR has already determined that the impacts of high rise construction may be mitigated but not eliminated. The plan contains mitigation measures. The City Council has concluded that there are overriding considerations which warrant retention of its high rise policies. Despite the possibility of increased impact resulting from possible additional high rise buildings (each of which would be required to have an EIR which would deal with their specific visual impacts), it does not appear that the policy statement modification itself would require an important revision to the EIR.

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